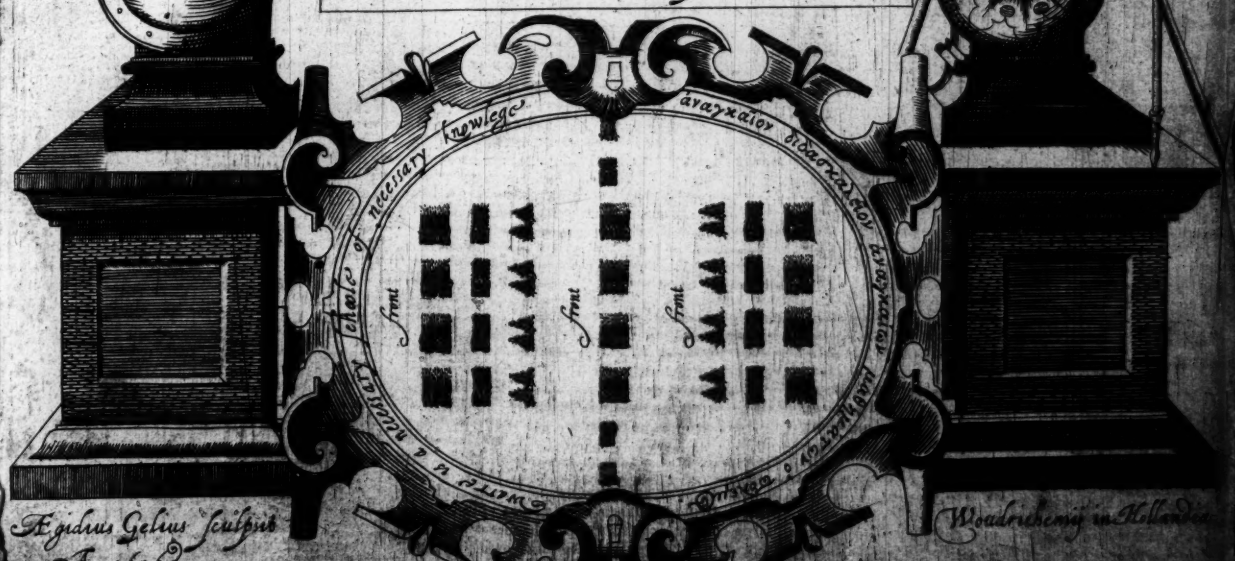
THE TACTIKS OF ÆLIAN

Or art of embattailing an army after ye Grecian manner

Englished & illustrated wth figures throughout: & notes vpon ye Chapters of ye ordinary motions of ye Phalange by I.B.

The exercise military of ye English by ye order of that great Generall Maurice of Nassau Prince of Orange &c Gouernor & Generall of ye vnited Prouinces is added

At London for Laurence Lisle & are to be sold at his Shoppe at ye signe of the Tigers head in Paules Church yard



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TO THE HIGH AND MIGHTY *CHARLES*, ONLY SONNE OF HIS *MAIESTY*, PRINCE OF Wales, DVKE of Cornewall, Yorke, and Albany, MARQVISE *of Ormont*, EARLE *of Chester, and Ross*, LORD of Admanoch, and KNIGHT of the *most noble order of the* Garter.

HOw much the *Græcians* excelled all other Nations in the Sciences called Liberall, is better knowne in generall, then needfull at this time particularly to be rehearsed to your *Highnesse*. The *Romans* themselues albeit otherwise ambitious, and out of measure thirsty of honour, and challenging to themselues the highest degree of grauity, constancie, greatnesse of minde, wisedome, faith, and skill of war, contended not herein, but freely left them the possession of that praise vnquestioned. For warre it is not my purpose at this time to make comparison, or commit the two Nations together. The controuersie is already moued by other, and hangeth vndecided in the Court of learning. Thus much, me thinks, I may truly affirme, that the *Græcians* were the first, that out of variety of actions, and long experience reduced the knowledge of Armes into an Arte, and gaue precepts for the orderly mouing a Battaile, and taught, that the moments of victory rested not in the

hands of multitudes, but in a few men rightly instructed to manage armes, and trained vp in the obseruation of the discipline of the field. In which regard they had almost in all Cities amongst them Masters of Armes, whom they called *Tacticks*, which deliuered the Arte Military to such, as were desirous to learne. Out of whose Schooles issued those chiefs of warre in number so many, in skill so exquisite, in valor so peereless, in all vertues beseeming great Generals so admirable, that no Nation of *Europe* euen to this day hath been able to match, much lesse to ouer-match their fame, and glory. And the time was when the *Lacedemonians* exceeded the rest in Martiall skill, and were thought to be the best Souldiers of *Greece*; by meanes whereof they aduanced themselues to the Principality of *Greece*, which they held with such reputation, that an enemie by the space of 500 yeares was not seene within their Territory. Till at last growing insolent, and surfeiting of, and being not able to brooke their owne fortune, they sought to oppresse, and with wrong and force to possesse the City of *Thebes*, and stirred vp *Epaminondas* a *Theban* by birth, and from his tender yeares nourished by his fathers care in the study of Philosophy, and the science of Armes, to oppose against them, who in two battailes, the one at *Leuctra*, the other at *Mantinea* so broke their forces, that from that day forth they were neuer able to recouer their wonted authority, and power in the field. *Philip* the sonne of *Amyntas* King of *Macedonia*, being but a priuate man, was deliuered as a hostage to the *Thebans*, & brought vp in the same house and learning with *Epaminondas*. He afterward became King of *Macedonia*; which being of it selfe but a poore kingdome, and before his time sometimes kept vnder by the *Athenians*, sometimes by the *Lacedemonians*, sometimes by the *Thebans*, & finding it at his entrance

to the Crowne harried, and ſpoiled by the *Pæonians*, and forced to pay tribute by the *Illyrians*, by erecting a new arte, and diſcipline of warre, to which he exerciſed, and enured his *Macedonians*, he not only freed his Countrey from the Barbarous nations, but alſo ouercame the *Græcians*, accounted the only Maſters of armes till that day, and cauſed himſelfe to be declared Generall of *Greece* againſt the *Perſians*: againſt whom after he had made his full preparation, he reſolued to go in perſon. But being preuented by death, he left the ſucceſsion of his kingdom, and execution of his deſignes to *Alexander* his ſonne, whom he had before curiouſly inſtructed in the diſcipline of Armes inuented by himſelfe. The ſame *Alexander* (being about 20 yeares of age) after he had vanquiſhed *Darius* in 2 great battailes in 12 yeeres ran through, and ſubiected the ſpacious, rich, and flouriſhing kingdomes of *Aſia*, euen as far, as the Eaſt *Indies*, and with terror of armes made the whole world to tremble at his name. His kingdomes were after his death diuided amongſt many Succeſſors, who by the ſame Arte military eaſily maintained the poſſeſsion of their conqueſts. This Arte is it, that I at this time preſent vnto your Highneſſe. It was compriſed in writing by many, and yet none of their works attained our age, but only that of *Ælian*, who hath in a ſmall volume ſo expreſſed the arte, that nothing is more ſhort, nothing more linked together in coherence of precepts, and yet diſtinguiſhed with ſuch variety, that all motions requiſite, or to be vſed in a Battaile are fully expreſſed therin. *Ælian* liued in the time of *Adrian* the Emperor. How much the booke was of ancient time eſteemed may appeare by this alone, that *Leo* a ſucceeding Emperor ſetting downe Martiall inſtructions for the gouernment of his *Empire*, tranſcribeth whole paſſages out of *Ælian*, & whenſoeuer he citeth, or nameth the *Tactick*s, he giueth ſtill the firſt place vnto *Ælian*.

 Howbeit

Howbeit the practiſe of *Aelians* precepts hath long lien wrapped vp in darknes, & buried (as it were) in the ruines of time, vntill it was reuiued, & reſtored to light not long ſince in the vnited Prouinces of the low-*Countries*, which *Countries* at this day are the Schoole of war, whither the moſt Martiall ſpirits of *Europe* reſort to lay downe the Apprentiſhip of their ſeruice in Armes, and it was reuiued by the direction of that Heroicall Prince *Maurice* of *Naſſau*, Prince of *Orange*, Gouernour, and Generall of the ſaid *Countries*, a Prince borne and bred vp in Armes, and (beſide the completenes of his other eminent vertues) for skill, experience, iudgement, and military literature comparable to the greateſt Generals, that euer were. I haue of late aduentured to take from *Ælian* his *Greekiſh* cloake, and to put him in *Engliſh* apparell, that in that habit he might attend your Highneſſe, and be ready with his ſeruice, in caſe he were thought worthy of employment. He had before for his Patron *Adrian*, an Emperor, and Ruler of the *Roman* world. Now he humbly craueth your HIGHNESSE fauour for his protection, who as in Princely deſcent, and ſucceſsion of Royall blood you are farre ſuperior, ſo in vertues worthy of your birth, and yeares, and in all hopefull expectations are you nothing inferior to *Adrian*. It may pleaſe your Highneſſe to regard him with a gratious eye, and to eſteeme the Preſentor of him your faithfull bedeſman, that will not ceaſe to pray to the mighty God of hoſts, to giue you conqueſt ouer all your enemies. From my Garriſon at *Woudrichem* in *Holland* the 20 of September 1616.

Your Highneſſe moſt humbly deuoted,

A Io: BINGHAM.

THE TACTICKS OF ÆLIAN

or art of embattailing an army after the Grecian manner.

THE *Grecian* arte of embattailing an army (moſt mightie *Auguſtus Ceſar Adrian*) the antiquitie whereof reacheth back to the age wherein *Homer* lyved, hath beene committed to wryting by many, whoſe skill in the *Mathematicks* was not reputed equal with myne: whereby I was induced to thinke it poſſible for me ſoe to deliver the groundes therof, that poſteritie ſhould rather regard and eſteeme my labors, then theirs, that before me haue handled the ſame argument. But weighing againe myn own ignorance (for I muſt confeſſe a truth) in that skill & practiſe of armes, which is now in eſteeme among the *Romaines*, I was by feare with-held from reviving a ſcience half dead, as it were, and ſince the invention of that other by your aunceſtors, altogeather out of requeſt and vnregarded. Notwithſtanding comming afterward to *Formie* to doe my dutie to the Emperour *Nerva* your maieſties father, It was my fortune to ſpend ſometime with [2] *Frontine* a man of Conſular dignitie, and of great reputacion by reaſon of his experience

in militarie affaires: and after conference with him perceiving he imparted no leſſe ſtudie to the *Grecian*, then to the *Romaine* diſcipline of armes I began not to deſpiſe that of the *Grecians*, conceiving that *Frontine* would not ſo much affect it, if hee thought it inferiour to the *Romaine*. Having therefore in times paſt framed a project of this worke, but yet not daring then to publiſh it in regard of [3] your majeſties incomparable valour, and experience, which make you famous aboue all Generalls without exception, that euer were: I haue of late taken it againe in hand, & finiſhed it, being (if I deceaue not my ſelf) a worke both worthy to be accompted of, & of ſufficiencie, eſpecially with ſuch as are ſtudious of the arte, to obſcure the credit of the auncient *Tacticks*. For in reſpect of the perſpicuitie I dare bouldlie affirme, the reader ſhall more advantage himſelfe by this little volume, then by al their writings: ſuch is the order and methode, I haue followed. Howbeit I durſt ſcarcely offer it to your majeſtie who haue beene Generall of ſo greate warres, leaſt happily it proue too too ſlender a preſent, & altogether vnworthy of your ſacred viewe. And yet if your majeſtie ſhall bee pleaſed to thinke of it, as of a Greekiſh *Theorie*, or a various diſcourſe it may bee, it will giue you ſome little delight, the rather becauſe you may therin behold [4] *Alexander* the *Macedons* manner of marſhalling his fields. And for that I am not ignorant of your majeſties more weightie affaires, I haue reparted it into chapters; to the end you may without reading the booke in few wordes take the ſomme of that, which is to bee delivered, and without loſſe of time find the places you are deſirous to peruſe.

Notes.

Notes.

THe Tacticks] *As Taxis in a general ſence ſignifieth order, ſo* Tacticos *is as much, as perteyning to order: but ſpecially taken, it ſignifieth perteyning to order of a battaile, or to the embattailing of an army. Hereof the arte of embattailing an army is called* Tacticè, *and hee, that is skillful, and experienced in that arte.* Tacticos (a *Vegetius nameth him* magiſtrum armorum) *and the books written of the arte,* Tactica. *And that this is the true ſignification of the word may appeare by Xenophons Cyropædia, where the arte Tactick is diſtinguiſhed from the arte Imperatory, or arte of a Generall. Hee induceth Cyrus, in a diſcourſe with his father ſpeaking thus:* b In the end you asked mee what my maſter taught mee, when hee profeſſed to teach the art Imperatory. And when I anſwered, the Tacticks, you ſmiled, and aſked particulerly, what the Tacticks availed without proviſion of thinges neceſſary to liue by? what without preſervacion of health? what without knowledge of arts invented for the vſe of warre? what without obedience? ſo that you plainely ſhewed, that the Tacticks are but a ſmall portion of the arte Imperatory, or of commanding an army. *Thus Xenophon: making a difference between the arte Imperatory, & the arte Tactick. And in other place hee ſpeaketh yet more particulerly:* c Cyrus, *ſayd hee,* eſteemed it not the duty of a Tactick to enlarge onely, or to ſtretch out in length the front of his Phalange, or to draweit out in depth, or to reduce it from a winge to a Phalange, or to countermarche readily, the enemy ſhewing himſelfe on the right, or left hand, or in the rear, but to diuide it, when need is, & to place euery part for moſt advantage, & to leade it on ſpeedily, when occaſion is of prevention. *Yet ſometimes in a generall ſignification books entreating of the whole arte of warr are called Tacticks: as the Conſtitutions military of the Emperour Leo are entituled* Tactica Leonis, *perhaps of the beſt parte, becauſe the* d *arte of embattailing an army hath alwayes been eſteemed the chiefeſt point of skill in a Generall. Howbeit Ælian in his title of this booke taketh* Tacticè *in the ſtreighter ſignification: as appeareth by the definitions, he alleageth out of Ænæas and Polibius: of whome the firſt defineth the art Tactick* to bee a ſcience of warlick motion; *with whome alſo* f *Leo agreeth: the other, to bee* a skill, whereby, a man taking a multitude ſerviceable, ordereth it into files, and bodies, and inſtructeth it ſufficiently in all thinges apperteining to warre. *Which two definitions comprehend in fewe words the argument of the whole booke. For firſt Ælian intreateth of* levieng, *& of* arming *men, then of* filing, *next of* joyning files, *and making* bodies, *after of* ordering *the whole* Phalange, *or* battaile, *further of* motions requiſit to affront the enemy, *wherſoever he giveth on, whether in* front, flank, *or* reare; *laſtly of* marching, *and of the ſondry* formes of battailes *carieng with them advantage of charging or repulſing the enemy in your* marche. *He, that will further vnderſtand the boundes of this arte, let him reade in the 21. chapter of Leo the 58. ſection.*

a Veget. prolog. lib. 3.

b Xenoph. cyropæd. lib. 29. B.

c Xenophon cyrop. lib 8 c. 227.

d Plut. in Philopæment.

e infra. cap. 3.

f Leo. cap. 1.

1 The Emperour Nerva your maieſties Father] *The Emperour Nerva here mentioned was not Nerva Cocceius, whoe ſucceeded Domitian, but Vlpius Traianus, who was alſo called Nerva, becauſe he was adopted by Nerva Cocceius, & ſucceeded in the Empire. And where Ælian termeth him Adrians father, indeed Adrian pretended, he was Traians ſonne by adoption. But* g *Dio plainely denieth it, & Spartian ſaith,* ſome reported hee was adopted by the faction of Plotina (Traians wife) by ſubſtituting one to ſpeake with a faint voice, as if it had beene Traian vpon his death-bed, whereas Traian was before departed this world. *This is agreed, that he was Coſin*

g Dio & Spartianem in vita Adriani.

german once removed to Traian, & that his father dieng, he (being but ten yeares olde) was ward to Traian (then a private man) and to one Cælius Tatianus.

2 To spend some time with Frontine] *Frontine heer mentioned was the same that wrote the book of Strategemes, now extant, & commonly ioyned in one volume with Vegetius. Hee was a man curious in the searche of the Græcian discipline, as may be seene by his owne preface to his bookes of Strategemes: & by the testimony of Ælian, & in the first chapter of this treatise, is reckoned amongest the Tactick writers.* [a] *Vegetius reporteth he was much esteemed by the Emperour Traian. Hee lived also in greate reputation in the time of Vespasian: at least if it bee hee, that Tacitus speaketh of in the life of Iulius Agricola. And yet it might bee he very well, there being noe more then twenty yeares, & certeine monthes betwixte the reigne of Traian, & the reigne of Vespasian in whose time Frontine is reported by* [b] *Tacitus to haue overthrowne the Silures in Britaine. Ælian in the next chapter calleth him Fronto. Of one Fronto, that was Consul in the third year of the reigne of Traian, I read in* [c] *Dio: whose saying is reported to haue been:* That it was ill to haue an Emperour, vnder whome noe man might haue liberty to doe any thing, but much worse to haue an Emperour, vnder whome every man might doe what hee list. *But this Fronto was not Ælians Fronto. Hee was called Marcus Cornelius Fronto; this (that Ælian speaketh of) Iulius Frontine. And yet it is noe wonder that Frontine in latine should be called* Fronto *in Greek, it being vsual for the Græcians to varie, and deflect a litle from the property of the latine names.*

a Veget lib. 2. cap. 3.

b Tacit. in vita Agricolæ.

c Dio in vita Nervæ.

3 Your majesties incomparable valor & experience] *That this praise given Adrian is not altogether without cause, may appeare by that, which* [d] *Ælius Spartianus writeth in the life of Adriã. His wordes haue this meaning:* After this, taking his journey into France, he was bountifull to all, as he sawe cause. From thence hee passed into Germany, & being rather desirous of peace, then warre, yet hee so exercised his souldiers, as though warre were at hand; teaching them to indure paines & hardnesse, himselfe giving an example of military life: gladly also vsing Camp-fare, as namely lard, & cheese, for meate, & water mingled with vineger for drink, in imitation of Scipio Æmilianus, & of Metellus, & of Traian the author of his preferment & rising, bestowing rewardes vpon many, honors vpon some, to encourage them to beare such things, as seemed harshe in his commaundes. And surely it was hee next Octavius, that vpheld military discipline (declyning nowe through the remissenesse of former Emperours) by ordering both the places of Commaunde, & the payes; never suffering any man to absent himselfe from the Campe, but vpon just cause: measuring the worthe of Tribunes not by favour of the souldiers, but by their owne desert; exhorting, & exciting all the rest by example of his owne vertue, whilest hee often marched twenty miles on foote, being fully armed, broke downe banquetting howses, and galleries, & vaults for coolenesse, & arbors, whereseever hee fownd them in the Campe; & was seene in a plaine garment vsually; wore a baudricke not gamished with gold, buttons without gemmes; scarcely allowing an ivory handle to his sword; visited his sick souldiers in their lodgings, himselfe chose out the grownd to encampe in: made noe Captaine, but a man of a strong body, noe Tribune, but with a growne beard, or of age, that by prudence, and yeares was able to sway the weight of the place: nor suffred him to take ought from the souldier; removed all delicacies; and lastly reformed theire armes, and baggage. Hee had besides consideration of the age of souldiers, allowing none younger, then was befitting vertue; nor elder, then stood with the lawes of humanity, to bee conversant in the Campe, contrary

d Spartian. in vita Adriani.

trary to old custome, and vsage: and gaue himselfe to haue particular knowledge of them all, and what their number was. Furthermore he was carefull to vnderstand the controuersies betwixt souldier and souldier, and searched with great attentiuenesse into the revenues of the Provinces, to the end to supply, what was wanting; endevouring notwithstanding aboue all neither to buy, nor feede ought, that was not for vse. Wherefore when he had fashioned his souldiers to his owne example, he passed over into Britaine, where he corrected many things, and was the first that drew a wall a-long by the space of eighty mile; wherewith he diuided the Romans from the barbarous people. *Hitherto* Spartian. *I haue recited the historie at large, because I might represent the picture of an excellent Generall.*

4 Alexander the Macedons manner.] *That this booke comprehendeth the Macedonian discipline of armes, I will shew hereafter, as particulars offer themselues. In the meane time let this suffice for an argument, that* Ælian *doubteth not to affirme it to* Adrian, *a Prince excellently learned in the Greeke language; and as by reason of skill he was able to discerne, so by his authoritie he would haue censured so grosse an escape, if it had beene otherwise, than* Ælian *reporteth.*

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The Authors that haue written Tacticks; of this booke, and of the profit of the Arte.

Chap. I.

Homer the Poet ſeemeth to be the firſt, (at leaſt we read of) that had the skill of imbattailing an Army, and that admired men indued with that knowledge; as appeareth by *Meneſtheus* of whom he writeth,

His like no liuing wight was found, nor any age did yeild,
To marſhall Troopes of horſe, or bands of foote in bloudy field.

Concerning *Homers* diſcipline militarie, the workes of *Stratocles*, and of [1] *Frontine* a man of Conſular dignitie in our time are to be read. [2] *Æneas* perfected the Theorie thereof at large publiſhing many volumes of warfare, which were abridged by [3] *Cyneas* the *Theſſalian*. Likewiſe [4] *Pyrrhus* the *Epirote* wrote *Tacticks*, and his ſonne [5] *Alexander*, and *Clearchus*, and *Pauſanias*, and [6] *Euangelus*, and [7] *Polybius* the *Megapolitan* (a man of great learning, *Scipioes* companion) and *Eupolemus*, and [8] *Iphicrates*; [9] *Poſſidonius* alſo the *Stoick* ſet forth the art of warre, and many other, ſome in Introductions, as *Brion*, ſome in large *Tactick* volumes. All which, I haue ſeene, and read, and yet thinke it not much to purpoſe to mention particularly; being not ignorant, that it hath beene the manner of thoſe writers for the moſt part, to apply their ſtile not to the ignorant, but to ſuch as are already acquainted with the matters they intreat of. As for the impediments, which preſented themſelues to me, when I firſt gaue my minde to the ſtudie of this Art, as namely neither to happen vpon ſufficient Inſtructors, nor yet to find light, or perſpicuitie enough in the precepts delivered; I will endeuour, as much as I can, to remoue out of other mens way: And as often as words ſhall faile to expreſſe my meaning, I will for plaineneſſe ſake, vſe the direction of figures, and pourtraicts, adioyning thereby the view of the eye, as an aide, and aſſiſtance, to the vnderſtanding, and withall reteine the termes of auncient Authors, to the end, that whoſoever ſhall follow this booke for an introduction, being therein exerciſed both to the ſame words; and alſo to the vſage of things expreſſed in them, may grow as it were acquainted, and imagine himſelfe no ſtranger, when he commeth to read their workes. By which waies by me preſcribed, I make no doubt, they will eaſily be vnderſtood. Now that this Art of all other is of moſt vſe, may appeare by *Plato* in his booke of Lawes, where he ſaith: *That the Cretan Lawgiuer ſo contriued his Lawes, as if men were alway prepared to fight. For all Cities haue by nature vnproclaimed warre one againſt another.* Which being ſo: what diſcipline is more to be eſteemed, or more auaylable to mans life, then this of warre?

Notes.

It seemeth by this Chapter, that the Authors, that haue of auncient time written Tacticks, haue beene many: and those not of such kinde of men, as haue giuen themselues to study, and contemplation alone, but of such, as besides their knowledge in good letters, haue beene actors in warre themselues; & (which is more) principall actors, some of them Generalls, other the next degree to Generalls. Howbeit there is none here mentioned by Ælian, *whose workes are extant. Whereby may be esteemed the inestimable losse, these later ages haue suffred, in being deprived of such excellent monuments. I hope, I may so terme them without offence, though I haue not seene them. For what but excellent, can proceed from men of such excellencie in their profession? such as the most part of those were. Yet for some of them I can say nothing, as finding litle remembrance of them in ancient writers. Of this kind are* Eupolemus, Stratocles, Hermias, Clearchus, Pausanias: *albeit such names may often be found: The rest are specially mentioned, and much commended. Of whom I will set downe, what I finde.*

1 Frontine a man of Consular dignity] *I haue before noted somewhat of Frontine. We haue of his, as it is thought, other workes, besides his stratagemes: but this booke of Tacticks, whereof* Ælian *speaketh, we haue not. I will onely adde the relation of*

a Veget. lib. 2. cap. 3. [a] *Vegetius touching Frontine, who writeth thus:* Cato the elder, albeit he had beene both invincible in armes, and often Generall of great Armies, beleeued yet he should more profit his Countrey, if he laid downe in writing the discipline of warre. For valiant acts are but of one mans age, but things written for the profit of the State endure for euer. Many other haue done the like, but especially *Frontine*; whose industry herein was greatly approved by the Emperour Traian.

b Polyb. lib. 10 pag 615. 2 Æneas perfected the Theory.] *Æneas is mentioned by* [b] *Polybius in his tenth booke, where he discourseth of signes to be made by beacons of fire, in case an enemy approacheth to any part of our Countrey. His bookes were intituled,* Commentaries of the office of a Generall, *as Polybius saith; and Ælian here calleth them,* Bookes of the office of a Generall, *the title being all one in effect. Of these bookes none haue reached to our age, but one alone, which compriseth precepts of defending a Towne besieged, and some 5 or 6 yeares agoe came first to light, and print: that worthy man* Isaac Casaubon, *the learned ornament of his Countrey, (and of England so long, as he liued there) being the setter forth. And it is adioyned to his edition of Polybius. These bookes Tactick of Æneas were abridged (as Ælian saith) by*

3 Cyneas the Thessalian] *Plutarch in the life of Pyrrhus telleth vs what Cyneas*

c Plutarch. in Pyrrho. *was.* [c] There was, saith he, in the Court of Pyrrhus a Thessalian, a man of great vnderstanding: and who hauing heard the Orator Demosthenes, seemed alone of all, that then were esteemed eloquent, to renew in the memory of the hearers an image and shadow of the vehemencie and vigor of his vtterance. Pyrrhus held him in his Court, and made vse of him, in sending him in embassages to people and Cities. In which embassages hee confirmed the saying of Euripides.

What ever force can doe, with trenchant swords;
The same, or more, is wrought by pleasing words.

Therefore was Pyrrhus wont to say, that Cyneas had gained more Cities with his eloquence, then himselfe with armes. By occasion whereof hee did him

him great honor, & employed him in his principal affaires. [a] *Tully ſpeaketh of his* workes: your letters, (ſaith he to Papyrius Pætus) haue made me a great Generall: I was altogether ignorant of your ſo great skill in military matters. I ſee you haue read the books of Pyrrhus & Cynæas, I therefore purpoſe to follow your counſel: this yet more, to haue ſome fewe ſhippes in a readineſſe vpõ the ſea-coaſt. They ſay, there is noe better armour againſt Parthian horſemen. But why ſport wee? you knowe not, with what a Generall you haue to doe. I haue in this my governement fully in practiſe expreſſed Xenophons inſtitution of Cyrus: which before I had worne a pieces with reading. *Pyrrhus & Cynæas, hee nameth, as two principall Authors of warlick diſcipline: And where he addeth Xenophon, whoe, though he be not named by Ælian amongeſt the Tactick writers, deſerveth yet not to be pretermitted, having been both a great Cõmaunder, & beſides writtẽ largely of military matters, whoſe workes alſo are now extãt; let vs ſee, what he ſaith of him in another place.* [b] Cyrus, *ſaith he,* is written by Xenophon, not according to the truthe of an hiſtory, but for a patterne of juſt governement. Whoſe wondrous grauity is by that Philoſopher matched with ſinguler Curteſie, which bookes our Africanus, (and that not without cauſe) was never wont to let goe out of his handes. And of Africanus he reporteth the like in his [c] Tuſculan quæſtions.

a Cicero. epiſt. familiac. lib. 9 epiſtol. 13.

b Epiſtel. ad Q. frat. lib. 1. epi. 1.

c Tuſcul. queſti. lib. 2. 146.

4 Pyrrhus the Epriote wrote Tacticks.] *Pyrrhus the K. of Epirus was of auncient time eſteemed one of the beſt Generalls, that ever was. What* [d] *Anniballs iudgement was of him Liuy reporteth, &* [e] *Plutarch in the life of Pyrrhus. And Antigonus being demaunded, whom hee thought the greateſt generall, then living, aunſwered Pyrrhus.* And where other Kings imitated Alexander the great in purple apparaile in number of gardes about theire perſons, in carieng the necke a litle awry, & in ſpeaking lowde, hee alone repræſented him in exploictes of armes, & in deedes of prowes, *ſaith Plutarch.* [f] *Plutarch ſaith likewiſe:* Towching his skill in the arte military howe to order a battaile, and howe to bring his men to fighte with moſt advantage, a man may draw proofe ſufficient out of the books, he wrote; of which bookes Tully ſpake in the laſt paragraph.

d Liuy. decad. 4. lib. 5 87. 2.

e Plut. in Pyrrho.

f Plutarch. in Pyrrho.

5 And his ſonne Alexander.] *Pyrrhus had by his firſt wife Antigone a ſonne called Ptolomey, by Lanaſſa, another called Alexander, & by Bircanna, the third named Helenus.* [g] All which albeit by race & inclination of nature they were Martial, yet brought he them vp, & from theire birth framed & enured to armes. And the report is, when vpon a time one of them, yet a chylde, asked him, to which of them he would leaue his kingdome, to him, aunſwered Pyrrhus, who ſhall haue the ſharpeſt ſworde: [h] *Iuſtin alſo makes mention of theſe three ſonnes. Ptolomey was ſlaine at Sparta, as* [i] *Iuſtin would haue it.* [k] *Plutarch ſaith he was ſlaine in the way betwixt Sparta & Argos.* [l] *Alexander reigned after his fathers deceaſe, in the Realme of Epirus. That hee wrote Tacticks, I haue not read, but in Ælian onely.*

g Plutarch. in Pyrrho.

h Iuſt lib 18, 655. A.

i Lib. 25, 667. D

k Plut. in Pyrrho.

l Iuſtin. lib. 26. 668. C. Athenæus Dipnoſeph. lib 3. 73. B.

6 And Evangelus] *Plutarch diſcourſing of the ſtudies of Philopœmen hath this in effect.* [m] He tooke noe delight to heare al kinde of diſcourſes, nor to reade al books of Philoſophy, but ſuch onely, as might profit to the daylie encreaſe of vertue; And hee read not willingly other paſſages of Homer, then ſuch, as hee thought had ſome efficacy to moue a mans hart to prowes. But amongeſt, and aboue al other readings, he ſpecially affected the Tacticks of Euangelus: & likewiſe the hiſtories of the exploits of Alexãder the great. *This is al I find of the Tacticks of Evangelus. I geſſe notwithſtanding, he was a choice author, becauſe Philopœmen had him in ſuch eſteeme; of whome the ſame* [n] *Plutarch writeth:* That Greece bore him ſinguler affection, as the laſt vertuous man, which ſhee brought foorth

m Plutarch. in Philopœmen.

n Ibid.

foorth in her ould age, after so many great, and renowmed Captaines of auncient time; and alwayes augmented his power, and authority, as his glory encreased. In which respect a Roman, praising him, called him the last Græcian; meaning that after him Greece bred noe great, nor any personage in deed worthy of her.

7 And Polybius] *It is the same Polybius, whose History, so much as is extant, that excellent learned man Isaac Casaubon translated into Latin, and set foorth 1609. For his life and worth resort to the preface of the same Casaubon to Polybius his history. Hee had beene in Achaia, his owne countrey, Generall of the horse. Afterward being in displeasure with the Romans, hee lived long in prison at Rome: and was for his worth finally released by intercession of the greatest men of Rome: and became companion to Scipio Africanus the younger; with whom also he was at the siege and destruction of Carthage. His Tacticks, whereof Ælian speaketh, are perished with other of his workes. Yet are there many passages dispersed heer, and there in his history, which argue his extraordinary skill in matters of warre. And it may seeme, that Ælian hath taken much from him both for matter, and wordes.*

a Emilius Probus in vita Iphicratis. Xenoph. histor græc. lib. 6. 587. B.c. Diod sicul. lib. 15 479. Polyæn. lib 3. in Iphicrate. Iustin lib 6. 631. B.c.

8 Iphicrates] *Who will reade of Iphicrates, let him goe to* [a] *Æmilius Probus, that writeth his life. His actes are also declared by Xenophon, and Diodorus Siculus, and Polyæn, and Iustin and divers others, as they were incident to their generall historics. Hee was esteemed one of the best Generalls of his time: and was called out by name by Darius King of Persia to bee generall of the Græcians, his mercenaries, in the warre, hee had against the Ægyptians: His fame and æstimation was soe great with Alexander the great, that when his sonne (whose name was also Iphicrates) with other Græcians were taken prisoners by him, for that they came embassadours into Persia to Darius, he not onely spared him for the loue of the City of Athens, and for the remembrance of his fathers glory (*[b] *the wordes of Arrian) but held him about him in honour so long, as hee liued, and after his decease sent his reliques to Athens, there to be interred by his friendes, and kinsfolk.*

b Adrian. lib 2. 42. c.

9 Posidonius the Stoick] *Posidonius in his time was a Philosopher of high renowne, and of the sect, that were called Stoicks. Tully citeth him often in his workes. In the second booke of Tusculan quæstions hee recounteth,* [c] that Pompey the great, on a time comminge to Rhodes, was desirous to heare him. But vnderstanding hee was extreame sick of the goute, hee forbore not notwithstanding to visit him being a most noble philosopher: whome after hee had seene, and saluted, and vsed with honorable wordes, and told him, hee was sory, hee could not heare him discourse, you may, if you please, quoth Posidonius: and I will not suffer paine to bee cause, that so great a man seeke mee in vaine. Then, as hee lay in his bed, began hee gravely, and copiously, to dispute, that nothing was good, but that, which was honest. And when firebrands, as it were, of torment towched him to the quick amiddest his disputation, he broke foorth often into these wordes: Sorow, all *this is nothing: Though thou trouble me never so much, I will not yet confesse, that thou art of thy self evill. So Tully.* [d] *Pliny likewise telleth,* that Pompey, after the warre of Mithridates, going into the howse of Posidonius, a man famous in Philosophy, forbid his serieant to knock at the doore (as the manner was,) and the serieants bundles of roddes (*saith he*) were submitted to a doore by him, to whom East & West had submitted thēselues. *The same* [e] *Tully attributeth to this Posidonius the invention of a Sphære,* whose particuler conversions did worke the same in sonne & moone, and the other fiue planets, that is wrought by the motion of heauen euery day and night.

c Tuscul. quæstion lib. 2. 146.

d Plin. natural. hist. lib 7. cap 30 pag. 115.

e Cicero. de natura deor lib. 2. 207.

The

The preparation of warlicke forces and diuiſion of them, and how they are armed.

Chap. II.

I will then beginne with ſuch [1] preparations as are abſolutely neceſſary for ſeruice in warre, the forces whereof are of two ſortes, the one Land forces, the other ſhip forces. *Land* forces are ſuch, as fight on land: *Ship* forces ſuch, as are ordered for fight in ſhippes vppon Sea, or Rivers. But the order of *Sea* ſeruice I will reſerue for another place, and intreat now of things pertayning to *Land* ſeruice. The levies then for *land* ſeruice are either of thoſe, that *fight, and mannage Armes*, or elſe of thoſe that *fight not, but remaine in the campe for neceſſary vſes.* They fight that ſtand ordered in battaile, and with armes [aſſaile or] repulſe the enemy. The reſt fight not, as Phiſitians, merchants, ſervants, and other, which follow the campe to miniſter vnto it. Such as fight, are either *footemen*, or *Riders: footemen* properly, that ſerue on foote. Of *Riders*, ſome vſe *Horſes* ſome *Elephants*. They, that vſe *Horſes*, are caryed either one *Horſe-back*, or elſe in *Chariots*. And theſe are the differences in generall. But in ſpeciall the *foote*, and *Horſe* receaue many other diviſions; onely the *Elephants*, and *Chariots*, never varie. *Footemen* then are reparted into three kindes, one being *Armed*, another *Targettiers*, the third light, or naked. [2] The *Armed* beare the heavieſt furniture of all footemen [3] vſing according to the *Macedonian* manner large, round, *Targetts*, and [4] longe *Pikes*: [5] The *Light* contrarywiſe beare the lighteſt, having neither *Curace*, nor *Greue*, nor longe, or round *Targett* of any weight, but [6] flieng weapons onelie as [7] *Arrowes*, [8] *Dartes*, [9] *Stones* either for *hand*, or *ſling*. To this kind is referred the [10] armour of the *Argilos*, who hath his furniture like to the *Macedonian*, but ſome thing lighter. For hee carieth [11] a little ſlight *Torgett*, [12] and his *Pike* is much ſhorter, then the *Macedonian Pike*: which manner of arming ſeemeth a meane betwixt the *light*, or *naked*, and that which is properlie called *heavie*: as being lighter, then the *heavie*, and heavier, then the *light*: and that is the cauſe, that many place it amongſt the *light*.

The forces of *Horſe* (which wee diſtinguiſhed before from *Chariots*) as being ordered in *Troopes*, are either [13] *Cataphracts*, or not *Cataphracts*. They are *Cataphracts*, that cover theire owne, and theire horſes bodies all over with armour. Of not *Cataphracts*, ſome are *Launciers*, ſome *Acroboliſts*. [14] *Launciers* are ſuch as joyne with the enemy, and fight hand to hand with the *Launce* on horſeback. Of theſe, ſome beare longe *Targets*, and are thereVppon called *Targetiers*: Other ſome *Launces* alone without *Targets*, who are properlie called [15] *Launciers*, and of ſome *Xeſtophori*. [16] *Acroboliſts* on horſeback are ſuch as fight a far of with flieng weapons. Of theſe, ſome vſe *darts*, ſome *bowes*. They vſe *darts*, whome wee call [17] *Tarentines*. Of *Tarentines*, there are two ſortes; for ſome throw little [18] *darts* a farre of, and are termed *Darters* on horſeback, but properlie *Tarentines*: others vſe light darts, & [19] after they haue ſpent one, or two, cloſe preſently with the enemy like the *Lanciers*, which

wee

wee ſpake of, and fight hand to hand. Theſe in common ſpeech are named light horſemen. So that of *Tarentines* ſome are properly called *Tarentines*, whoſe manner is to darte a far of. Some light horſemen, who joyne, and fight hand to hand. [20] The horſemen that vſe bowes are termed *Archers* on *Horſe-back*, and of ſome *Scythians*.

Theſe then are the differences of ſuch as are in the Campe, the kinds of Souldiers being in nomber nyne: Of *footmen*, armed, *Targetiers*, *Light armed, or naked:* Of horſemen *Lanciers*, *Darters*, *Archers*, *Cataphracts:* And laſtlie *Chariots*, and *Elephants*.

Notes.

IN this Chapter the kindes of Souldiers are diſtinguiſhed according to theire ſeueral armes borne in fight. And therefore of foote ſome are called armed, *becauſe they beare heavy armes; other* light-armed *or* naked, *becauſe they weare no defenſiue armes, other ſome* Targetiers, *becauſe theire chief defence reſted in a ſlight target, wherewith they covered theire bodies. The horſe alſo haue theire appellation, as theire* armes *are. And ſome are Cataphracts, becauſe themſelues & horſes were armed compleatly, other Launciers, for that they vſed a launce: other ſome Acroboliſts, by reaſon they fought with flieng weapons a farre of. The firſt thoughts of a Prince, or State, that is reſolved to put an army into the field, ought to be to provide* armes. *Armes are the ſecurity of theire own ſouldiers, the terror of the ennemy, the aſſured or dinary meanes of victory. The antiquity of armes is all one with the beginning of warre. For when of auncient time mighty men puffed vp with pride, and led by ambition, ſought by violence to enlarge their empire, and to bring vnder ſubiection their bordering neighboures, they were enforced to flye to the invention of* armes, *without which noe victory could bee obteyned. Since,* armes *haue been taken vp for defence alſo, neceſsity, the mother of artes, inventing a meanes to withſtand ambition. As Antalcidas wel obiected to Ageſilaus being wounded by the Thebans;* you are well rewarded for your labour, quoth hee, ſince you would needes teache the Thebans to fight, that had neither will, nor skill ſo to doe. For the Thebans being put to neceſſity of defence grewe warlick through many invaſions of the Lacedemonians, *ſaith* [a] *Plutarch. Whoe were the inventers of the ſeueral pieces of armour, and of the diuers kindes of weapons vſed in old tyme, may appeare by the relation of* [b] *Pliny in his natural hiſtory. This is certeyne, that the moſt warlick nations, and moſt victorious haue alwayes ſought to haue advantage of theire enemies by advantage of armes. The end of armes is either to defend, or aſſault. Hence are armes diuided into two kindes: Defenſiue, and Offenſiue. Defenſiue are thoſe, which are worne to reſiſt the force, and charge of the enémy. Of this ſort are the head-piece, gorget, curace, vambrace, gantlets, taſes, greves, and target. For whereas there are eleven partes in man, the woundes of any of which bring with thē vndoubted death (as ſome* [c] *authors write) the* braines, *the* two temples, *the* throate, *the* breaſt, *the* belly, *the* two muſcles *aboue the two elbowes, the* other two *aboue the knees, &* the privy members *pierced with a thruſt: the* headpiece *ſerveth for the defence of the braine, and temples, the* gorget *for the throate, the* curace *for the breaſt, the* vambrace *for the muſcles of the armes, the* taſes *for the privities & belly, the* greves *for the muſcles aboue the knees, and the* target *for further aſſurance of the whole body, being moueable againſt all ſtrokes, and profers of the aſſailants. Offenſiue armes are ſuch, as men endevour to wound, or kill withall: as flieng weapons of all kindes, arrowes, ſtones out of ſlings, or the hand, ſwordes,*

[a] Plutarch, in Ageſilao.
[b] Plin. natural hiſtor. lib. 7. c. 56.
[c] Patric. Paral 2. Pag. 57.

swordes, pikes, partizans, iavelines, and the like. [a] But as defence and security of a mans self is more agreable to nature, then to hurt an enemy, so are the defensiue armes preferred before the offensiue, in that they bring safety to him, that beareth them, where as the other are imployed in annoieng the enemy onely. The Poets sett foorth their bravest and valiantest men alwayes best armed for defence. So Achilles in Homer, and Æneas in Virgil, are armed to point with armes wrought by Vulcan, to the end to remaine vntowched amiddest the stormes of their enemies weapons. The Grecian Lawgivers punished that souldier, that in fight cast away his target: not him, that lost his sword or pike. [b] Plutarch writeth, that at such time as Epaminondas assaulted Sparta (the most warlicke City of Greece) there was in the City a Spartan named Isadas, who was the sonne of Phœbidas, hee that surprised the Castle of Thebes called Cadmæa, and thereby stirred vp the warre betwixt the Thebans, and Lacedæmonians, & ruinated the principality of the Lacedæmonians in Greece. This man being in the flower of his age, and personable, and large of lymmes, ranne foorth of his howse all naked, his body annointed with oyle, without apparaile or armes, except a sword in one hand, & a Iavelin in the other; and breaking through the throng of those, that fought on his side, came to handes with the enemy, and overthrowing some, and killing other some, continued the fight, till the enemy was repulsed, and at last returned into the City without wounde. The chief magistrate vnderstanding hereof rewarded him with a Crowne for his valor, but yet fined him at a hundred [*] drachmes, for that he durst veter to fight without armes defensiue; iudging it a matter almost impossible, that a naked man should escape with life fighting against the armed handes of so many valiant enemies, as the Thebans were.

a Plut. in Pelopida.

b Plutarch. in Agesilao.

* Drachma hath in it 6 oboles that is about 6. pence sterling Iul. Pollux. lib. 9. cap. 6 438.

In armes was required, that they should bee strong, that they should bee fitte, that they should bee comely; strong to protect, or annoy, fitt to sette close to the body and bee manageable, comely to grace him, that beareth them. That defensiue armes ought to be strong, may bee shewed by the end of armes; which is to saue harmlesse against arrowes, dartes, and other offensiue armes of the enemy. If they faile of this end, they are of noe vse; it being better to be vnarmed, then cary armes, that will not defend. Without armes you haue the body free, and at liberty: carieng armes, though never so light, they must bee a cumber to you, and some what hinder the motion of your body. Armes therefore ought to bee sufficient to resist the weapons of the enemy. The inconvenience of defectiue and weake armes is well noted by Vegetius. [c] From the building of the City of Rome, saith hee, till the time of the Emperour Gratian, the foote armed their bodies with Cataphractes, and head-pieces. But when field exercise through negligence and slouth was given over, armour began to growe heavy, because it was fieldome put on. They made suite therefore to the Emperour first, that they might leaue of their Cataphractes, then their headpieces. So our souldiers encountring with the Gothes, were oftentimes wholy defeated and slaine by the multitude of their arrowes. And a litle after: so cometh it to passe, saith he, that they, whoe without armes, are exposed in the battaile to woundes, thinke not so much of fight, as of running away. Yet must wee not imagine, that those souldiers fought in their ordinary apparaile onely: I encline rather to the opinion of [d] Stewechius, whoe holdeth, that they tooke themselues to their military coates, called in [e] Notitia vtrâque, Thoracomachi: and to their Targets; This Thoracomachus was a garment invented long before Gratians time, and worne vnder the armours of the souldiers, and was a kind of felt, but being noe prose against arrowes, and their targets not sufficient to cover their heads, and whole bodies from arrowes, They were obnoxius to the shotte of the Gothes, and receyved those ouerthrowes, Vegetius speaketh of.

c Vegetius lib. 1 cap. 20, A cataphract is the iust and full armour of the foote. Hereafter wee shall see what that armour is.

d Stewechius in Vegetium pag. 52.

e Notitia vtraque Orientis, & Occident. in fine.

The matter whereof ſtrong armes were made, I find to bee divers. Some were forged of
a 1 Samuel cap. 17 verſ. 5. Steele: *as the armour of Goliath, and the head-piece of K. Saul. For it is not there ſette downe, what his curace was of, Notwithſtanding it is likely, it was of the ſame matter, of which his headpiece was made. Whē I ſay theſe armours were of Steele, I follow therin the iudgement of Tremelius and Iunius, whoe ſo tranſlate it; & with them alſo agreeth Vatablus. For the old trāſlation hath, that they were of braſſe: I haue not elſe where read of ſteele armour. And it may bee, that the old tranſlation had an eye vpon the vſage of auncient time, wherin the matter of armes was principally of* Braſſe. *Homer reporteth, that*
b 1 Homer Iliad. *the armour of* [1] *Diomedes was of* braſſe: *&* [b] *Pauſanias, that all the Heroes (that is the auncięt worthies about the time of the ſiege of Troy) had their armour of* Braſſe. [c] *Alcæus the Poet in deſcribing his armory ſaith, the reſt of his armes were of braſſe, as his* head-pieces, *his* greves, *his* Targets, *only his* Curaces *were of linen.* [d] *Pauſanias reporteth alſo that the ſword of Memnon was of braſſe, & the head of the ſpeare of Achilles, & Piſanders axe, & the head of Meriones his ſhafte.* [e] *Servius Tullius in ſeſsing the City of Rome, appointed the chiefeſt & richeſt Citizens to arme themſelues with headpieces, greves, Curace, & buckler alſo of braſſe. The* [f] *targets of the Lacedæmonians were of braſſe alſo by the inſtitution of Lycurgus. So that braſſe was much vſed in armes in the oldeſt times. And where Alcæus ſpeaketh of his* linen Curace, *I find that Curaces of linen were in requeſt alſo evē in thoſe times. Homer affirmeth that* [g] *Aiax Oileus had a linen Curace.* [h] *But afterward Iphicrates the Athenian held them ſo good, that he gaue them to his ſouldiers to weare, in ſtede of their vſuall armes made of iron, & braſſe. And Xenophon armeth* [i] *Abradates the K. of Suſe with a linen armour, adding that it was the manner of that Countrey. And Plutarch ſaith, that* [k] *Alex. the great, after he had gotten the victory againſt Darius in Cilicia, found emōgeſt the ſpoile a linē armour, which he afterward vſed in the battailes, he fought.* [l] *Patricius is ſo confident in the ſtrength of a linen armour of his owne device, that he doubteth not to preferre it before well tempered iron. What his invention is, he keepeth to himſelf, for feare the Turk ſhould haue intelligence of it, & ſo Chriſtianity bee driven to an exigent. Al men knowe, that the temper of an iron armour may be ſuch, as wil reſiſt the violence of a muſket ſhotte, and that at a neere diſtance. Neither is this temper the invention of our dayes. The like hath been of auncient time.* [m] *Plutarch writeth, that Demetrius beſieging Rhodes, was preſented with two irō armours brought out of Cyprus, either of the weight of 40. pownds. The maker of them, whoſe name was Zoilus, deſirous to ſhewe their ſtrength, & firmeneſſe, cauſed one to be ſet vp at the diſtaunce of 26. paces, and bee ſhotte at with an arrowe diſcharged out of a Catapult. The armour hitte remayned vnpierced, nothing appearing vpō it, but the raſing, as it were, of a pēknife. And that a Catapult is of more violēce, thē a muſket, the effects thereof declared in hiſtory make plaine. Whether a linen coate be of that reſiſtance, or not, hath not been yet tried. Nay the contrary hath been tried. For Alexander at a ſiege of a City of the Mallians (as I take it) was ſore wounded with an Indian arrowe through an armour of linen. Whoſe armour I would iudge to haue beene not of the ſtendereſt, and weakeſt, but of the ſureſt kinde. Yet is it not to bee paſsed over that Iuſtus Lipſius alleageth out of Nicetas Choniates concerning a linen armour of Conradus of Monferrate:* [n] Conradus, *ſaith hee,* fought then with out a target, and in ſteede of a Curace hee had on a woven weed made of flaxe, ſoked in ſowre wine, well ſalted, and often-folded. It was ſo ſure againſt outward force of ſtrokes, being fulled with wine, and ſalte, that it could not bee pierced with iron or ſteele. *This invention our age hath not beene acquainted with; whether it bee the ſame, that Patricius aimeth at, let experience iudge. That antiquity practiſed it in wooll, Pliny witneſſeth, who writing of wooll and woollen garments ſaith:* [o] Of wooll wrought and preſſed together by it ſelfe alone

c Athen. dipnoſeph lib 14. 627 A
d Pauſan. ibid
e Livy lib 1. 27 C
f Xeno. in Rep. Lacedemon 685 B
g Homer 2 Iliad
h Aemilius Prob. in Iphicrate.
i Xenoph. Cyro. lib 6. 169. B
k Plutarch. in Alexandro.
l Patric Paral.
m Plutarch. in Demetrio.
n Iuſt. Lipſius lib 3 dial. 6 ad Poly
o Plin. natural. lib. 8. cap. 48.

alone (I think as our hatters worke felt) a garment is made; & if you worke it with vineger, it cannot bee ſtrooke through with a ſword. This wooll ſo wrought, he calleth coactam; *which in Cæſar, as I take it, is called* Subcoactum. *Cæſars wordes ſound thus:* [a] Pompey, although hee had noe purpoſe to hinder Cæſars workes with his whole army; nor yet to hazard battaile, ſent notwithſtanding archers and ſlingers, of whome hee had great ſtore, to convenient places; and by them many of our ſouldiers were wounded; & a generall feare of arrowes fell vpon them; and well nigh our whole campe made themſelues coates and caſes of either felts (ſubcoactis) or quilts, or leather, thereby to avoide the daunger of flieng weapons. *But wee will leaue Patricius to his fancy, and adde an example out of Xenophon of armes vſed by the Chalybes, a nation inhabiting the Chaldæan Mounteines.* [b] The Chalybes, *ſaith hee*, were the moſt valiant nation, that the Græcians paſſed through, & ſuch as durſt come to handes with them. They vſed linen Curaces reaching downe to their bellies, and. in ſteede of winges, they had roapes thick woond, and faſtened together. *The ſtrength of roapes thick woond togither muſt, noe quæſtion; bee great. Cæſar confirmeth it. Emongeſt other defences, which his ſouldiers deuiſed for aſſurance of a Turret againſt the Engins of the Marſilians, hee ſaith:* [c] They made foure ſtories of Cables fitting the length of the walles of the Turret, and foure foote broade, and faſtened them hanging downeward to the beames ſticking out of the Turret on thoſe three parts, which lay toward the enemy; which kinde of covering alone, they had in other places made triall, could bee forced or ſtrooken through by noe miſſiue weapon, or Engine whatſoever. *This, I haue heard, was the device of the Spaniards in 88. to defend their ſhips againſt the fury of our artillery. Whereof I may inferre, that if Cables combined together bee of ſuch aſſurance againſt Engines, roapes thick layde and faſtened together muſt bee a ſtrong defence againſt a ſword. To end with the matter, whereof armes were made, I finde likewiſe, that the* [d] *Macrones vſed, in ſteede of Curaces, coates made of haire. And thus much of the matter of Armes.*

Beſides, armes ſhould be fitt for the body, and for the ſtrength of him, that beares them. When [e] *David was to fight againſt Goliath, K. Saul, ſeeing him without armour, cauſed his owne head-piece & curace to be put vpon him. David aſſayed to marche, but finding theſe armes to heavy, was faine to leaue them, and to goe againſt Goliath vnarmed. Saul was the* [f] *talleſt man of his nation, David but meane of ſtature, & to put armour proportioned to a large body vpon him, that is a great way leſſe of members, is as much, as to deliver him bound to his enemy. Xenophon emongeſt other cauſes, why the Lacedæmonian horſe were beaten by the Thebans at the Leuctrian battaile, alleageth this for a maine cauſe:* [g] That the richeſt men kept & furniſhed out horſes, & as often as muſters were takē, the man, that was to ſerue, ſhewed himſelf, & anſwered to his name, & receiving horſe & armes, ſuch, as were given him, was ſo led againſt the enemy. *They were beaten, ſaith Xenophō, receiving horſe & armes at al adventure, not knowing, whether they were fitt for ſervice, or not. Whether armes be to bigge or to litle, they hurt a like. To litle, they pinche the bearer, & make him not able to endure labour; becauſe he is in paine: To great, by theire ſlap and looſe hanging about the body, they hinder the motion of thoſe partes, that are to be imployed in fight. Being fitte they differ litle from ordinary apparaile, except it be in weight: which inconvenience is eaſily remedied by vſe, and practiſe.* [h] *Tully writeth of the Roman ſouldier, that his continuall vſe of armes was ſuch,* that hee noe more reconed his target, ſword, head-piece, & other armes to bee burdenous vnto him, thē his ſhoulders, armes, & hāds; & ſaid that armes were

a Ceſar de bell. ciuili lib. 3

b Xenoph. de exped. Cyri. l. 4. 338 B. Theſe winges came down from theire ſhowlders toward theire elbowes.

c Ceſar de bello ciuil. lib. 2

d Xenop. de exp. Cyri. l. 4. 340 A

e 1 Sam. c. 17. v. 38

f cap. 9. vſq

g Xenoph hiſt. græc. li. 6. 596 D

h Cicero Tuſcul. queſt. lib. 2

part of a ſouldiers body, being ſo fitly made & borne, that need requiring, they could throw down their burdens, & vſe their ready armes in fight, as the members of their bodies. *Yet muſt care be had, that theire weight exceed not the ſtrength of him, that beareth them. For whoe wil be able to continew long in fight, that beſide the labour of fight, is charged with a burden more, then he can well beare? The proofe is plain in*
a Aelian cap. 12 *beaſts, which how ſtrong ſoever they be, faint & tire vnder to much weight.* [a] *Alian after, ſpeaking of the length of pikes, giveth this rule, that* they bee noe longer then a man may well vſe, & wield in handling. *To much length maketh them to heavy, & vnfitte to be managed; wherby they reſt vnprofitable to offend the enemy. In this property of fitneſſe thoſe armes & weapons are comprehẽded, which are of moſt vſe in the field. For as in all other artes thinges of greateſt effect are alwayes praeferred, ſo is it in warr. There is great advantage in armes, which is the cauſe that one kinde hath been preferred before an other. Æmilius Probus giveth a notable teſtimony of skill in matters of warre to Iphi-*
b Aemil prob in Iphicra & Diod. Sicul. lib. 15, 480 *crates, of whom he writeth thus:* [b] Iphicrates the Athenian invented many things in warr. Hee chaunged the armes of the foote: For whereas before they vſed great targets, ſhort pikes, & litle ſwordes, he gaue them litle round targets, called *Peltæ*, that they might be fitter for motions, & encounters, and doubled the ſiſe of their pikes, & made their ſwordes longer. Hee likewiſe chaunged theire Curaces, & in ſtede of iron, & braſſe, brought in other wrought of linen, wher by he made them nimbler at all aſſayes. For leſſening the weight, hee brought to paſſe, that they as much covered the body, and yet were very light, and fitte for vſe. Of theſe targets, which Iphicrates invented, the names of *Peltati* (Targetiers) ſprong: *of whom wee ſhall heare more in this chapter. And yet wee muſt not heereof cõclude that Iphicrates chaunged all the armed foote into Targetiers; (for the*
c Xenoph. hiſt. Graec. l. 6, 528 D *Athenians had ſtill their armed, notwithſtãding this invention of Targetiers, as*[c] *Xenophon teſtifieth) but where as the Athenians before had noe targetiers of theire owne people, (as I coniecture) Iphicrates brought in this kind of armour: and ſo of the armed, hee*
d Plut. in Philo. Polyae. l. 6 in Philo. cem § 5 Pauſan. in Arcad. 434 *made ſome targetiers, & left the reſt to the armes, they bore before: iudging it more profitable to haue both Targetiers, & Armed of their owne people, then armed alone.* [d] *Philopœmen alſo the braue Achæan General taught his Countrey-men in ſtede of longe targets & Iavelines to take a rownd target (called* Aſpis) *& a pike after the Macedonian mãner; and to arme themſelues with head-pieces, Curates, & greues; and to ſettle themſelues to a ſtaid, and firme kind of fight, in lieu of concurſory, and peltaſticall encounters, and by this meanes brought thẽ to be valiant, & braue ſouldiers, & victorious in their fights againſt*
e Polyb. li. 2, 128 C & 120 C & lib 3. 264 B & lib. 6 469 B.C. *their enemies.* [e] *Polyb. diſcourſing of the Gaulois & Spaniſh ſwords of aunciẽt time, ſaith, that the* Gaules ſword was ſo faſhioned, that it ſerved onely to ſtrike with, and but for one ſtroke: after which it ſo bowed both in length & breadth, that vnleſſe the point were reſted vpon the grownd, & the blade rightened, you could not ſtrike with it the ſecond time. But the ſpaniſh ſword was both for thruſt & ſtroke, having a ſtrong point, & a ſtiffe & ſure edge to ſtrike withal on either ſide by reaſon of the firmneſſe of the blade. This difference the Romãs eſpied, and being excellent imitators of all thinges, which were beſt for vſe (though they were enemies from whom they tooke them,) made choice of the ſpaniſh
f Suidas in machara ſworde, *& after Annibals time cauſed their foote to vſe noe other.* [f] *Suidas witneſſeth it:* The Spaniards, *ſaith he*, in forme of ſwordes farre excell all other nations. For their ſwords both haue a ſtrong point, and an edge on either ſide, that entreth deep in ſtriking. Which cauſed the Romans, to lay down their owne countrey ſwordes, and take the ſpaniſh forme from them, that followed Anniball. The forme they took, but the goodneſſe of the mettall, & exactneſſe of the temper

they

they could never atteine vnto. *The Romans then reiected the french ſwordes, as of ſmall vſe, & imitated the ſpaniſh, becauſe they were fitt for ſervice. Xenophon deſcribing the nations, which followed Cræſus againſt Cyrus, theire manner of arming, and order in battaile, telleth of the* [a] *Egyptians, that they were armed with targets reaching downe to theire foote, with long pikes, & with ſwordes, which they call* Copides, *& for order, ſtood a hundred in depth, & bringeth in Cyrus deriding this manner of arming, and order, to his ſouldiers, ſayeng they were a like armed, a like embattailed. For theire targets, ſaid he, are greater then is fitte for action, & for fight, & being raunged a hundred deep, it is manifeſt, they will hinder one another in fight, except a fewe.* [b] *Annibal, after his firſt victory againſt the Romãs, armed his Africans (his beſt & moſt truſty ſouldiers) with the armour of the ſlaine Romans; becauſe he fownd it better, then his owne; & Pyrrhus vſed not onely the armour, but the Italian ſouldiers alſo: & raunged them a cohort & a Merarchy, alter natiuely one by another. And* [c] *Mithridates after his experience in his firſt warrs with the Romans, that aſwell in arming, as in manner of fight, they excelled all other nations, left the arming of his owne Countrey, & brought in the Roman ſword, & target, & reduced all as neere, as hee could vnto their diſcipline. So then* ſtrength & fitneſſe *are required in armes. To them is* comelineſſe *adioyned. The ſhield of Achilles how was it bewtified with pictures & Stories by Vulcan: and that of Æneas, comming out of the ſame forge, how glorious was it? To ſay nothing of the braue armes of Hector, Agamemnon, Diomedes, Glaucus, Turnus, Mezentius, & other.* [d] *Alexanders armes were very rich.* He had a Sicilian Caſſock gyrded vpon a double linen Curace the ſpoile of Iſſos: his headpiece was of iron, ſhining like pure ſilver, the work of Theophilus; about his necke was an iron gorget beſette with precious ſtones. A ſword hee had of wonderful temper & lightneſſe, the gift of the Citiean King. Hee wore a baudricke of prowder worke, then the reſt of his armour, the work of the elder Elicon, & the honour of the Rhodian City. [e] *And Cyrus the elder, that liued before Alex. time, had armes provided by his Grandfather Aſtyages both very faire, & fitte for his body.* [f] *Abradates the Suſian king had his* headpiece of gold, & vambraces, and bracelets about his wreſts, & a purple Coate, and a plume of hyacinthine feathers. *Neither did this bravery reſt emongeſt the Princes alone. The ſouldiers of Cyrus* [g] were furniſhed with the ſame armes, that Cyrus himſelfe bore, with ſcarlet coates, Curaces of braſſe, braſſe helmets, white plumes, ſwordes, & euery one a darte. They differed onely in this that their armes were guilded, Cyrus his armes ſhined, & had a reflexion, as it were, a looking glaſſe. *And* [h] *Alexan.* hearing of the riche armour, the Indians bore, to make his owne ſouldiers equall with thẽ in bravery, whom they exceeded in valor, cauſed theire targets to be plated over with ſilver (whereof they were after called *Argyraſpides*) & their horſe-bittes to be made of gold, & adorned theire Curaces, ſome with ſilver, other with gold. *This might ſeeme pompe & ſuperfluity in a yong King, were it not that the like was done by other the greateſt Generals of auncient times.* [i] *Ceſar may ſerue for an example for al, whoſe ſouldiers how gallant and braue they were, Plut. teſtifieth in his life. The Romans otherwiſe much addicted to frugality, allowed yet liberally ornaments to the honouring of worthy ſouldiers, rewarding them for their ſervice,* [k] *with rich trappings for horſes, chaines of gold, bracelets, crownes of gold & other honors: which they wore not only in the field, but at al other ſolemnities & meetings in the City. And for every common ſouldier they provided plumes of purple, or blacke fethers, every one of a cubit long. Of which plumes Polyb. giveth this iudgement:* Pluimes, *ſaith hee,* being added to the reſt of the armour maketh a ſouldier ſeeme twice as great, as hee is; and beſide the faire ſhewe, they make, they are terrible to the enemy in fight. *A man may ſeeme as light, as a fether, that diſcourſeth of plumes, & fetcheth ornament from fethers.*

a Xenoph. Cyr. lib 6. Copides were ſwordes a litle bending at the pointes, like ſithes Curt. lib 8 375

b Polyb lib 17 pag. 763 C

c Plutarch in Lucullo

d Plut. in Alex.

e Xenoph. Cyrop lib 1, 18 C

f Xenoph. Cyrop lib 6, 169 B

g Xenop. Cyrop lib 7, 172 B

h Curtius lib 8 Silver-targetiers.

i Plutarch in Cæſare.

k Plinius hiſtor. nat lib 7 cap 28 Polyb. lib 6, 483 B, C

Yet may I truely affirme, that the vse of plumes is very auncient, & that the Romans bo-
a Herod. li. 1. 34 *rowed it from the Græcians, and the Græcians from the* [a] *Carians, whoe were the first in-*
b Polyen. li. 7 in Psammetich. § 1. *venters of them. As much is testified by* [b] *Polyenus: He saith that Tementhes K. of Egypt going to the oracle of Ammon about the state of his kingdome, had aunswer to beware & take heed of* Cockes. *Psammetichus, that sought the kingdom, had Pigretes a Carian to one of his familier friends & learning of him, that the Carians were the first that invẽted Plumes to their helmets, & evẽ then continued the vse of them, & coniecturing that the meaning of the Oracle was not of Cockes, but of men, that, wearing some ornament on their heads, had a resemblance of Cockes, waged a multitude of Carians against Tementhes, by whose help he overthrew Tementhes in battaile, & possessed himself of the crown of Egypt. Now for the true end of souldiers ornaments I wil onely adde one example. Philopœmen the Achæan in reforming the abuses crept into the Achæan State* with great
c Plu in Philop. Polyb li. 11, 629. C. iudgement (*I will vse the wordes of* [c] *Plutarch,*) reduced to order theire delicacies & superfluities. It was not possible quite to take away the sickenesse of vain & idle desires, wherewith they had of long time been possessed, delighting in excesse of apparaile, in riche dyes of coverlets, & carpets, striving one with another, whoe should be most sumptuous in bankets & feastings. But by litle & litle beginning to turne theire thoughts from vnnecessary expences to a loue of comelinesse in thinges, that were profitable & honest, he brought them at last to leaue the expences of the body, & to shew themselues gallant, & braue, in soldierly, & warlick furniture. A mã might therfore haue seene the shoppes full of silver and golden cuppes cutte a pieces, of curaces guilded with gold, of silvered targets, and bittes; the places of exercise fraught with colts then first backed for service, & with yong gallãts managing their armes; & in the handes of women head-pieces adorned with divers-coloured trymmings, horsemens coates, and souldiers cloakes curiously embellished with flowers. For the very sight of these things both encreaseth Spirit, & stirreth vp desire, & engendreth an vndaunted boldnesse, and alacrity to daungers. In other shewes to much lavashing bringeth in effeminateneesse, & worketh a remissenesse of minde, the sence with vaine pleasings and ticklings subverting, as it were, the vigor and force of the vnderstanding. But in these the Spirits are much heigthened, and exalted. As Homer bringeth in Achilles at the very sight of his newe armour ravished and inflamed with a desire to bee doing with it. Thus garnishing the youth hee exercised & hardened them to laboure and warlicke motions, making them thereby to vndergoe with desire whatsoever they were commaunded. So farre Plutarch. *Out of whose opinion it followeth, that Bravery of armes raiseth the spirits, stirreth vp desire to fight, maketh the souldier bold, and cherefull to perills, and as Polybius holdeth pleaseth the sight, encreaseth stature in shewe, and is a terror to the enemy. Yet ought there therein a meane to be sought, & rather an assuraunce followed, then vaine gazing and ostentation. Antiochus being to fight with the Romans gathered a mighty army together. And seing them glitter with gold and silver, and with all excesse of bravery, as the manner of the Asiaticall people was, tooke so great delight therein himself, that calling Anniball vnto him, hee shewed his troopes, and demaunded, if hee thought not that Army sufficient for the Romans: yes quoth Anniball, though they were the most covetous people in the world. Anniball with good reason derided the vaine shewe fitter for a mask, then a field, which hee assured himselfe, would fall into the Romans handes to bee spoiled. Mithridates committed the like errour in his first warre*
d Plutarch. in Lucullo. *against the Romans.* For, as Sophisters are wont for the most parte, saith [d] Plutarch, hee was in the beginning vaine glorious, and conceited by prowde warring against the Romans with weake forces, but yet sette out with pompe, and

bravery

bravery to the outward view: But being foiled to his ſhame, and weighing in his minde, he muſt take vp ſecond armes againſt them, he ſought to reduce his forces to a true kinde of arming, & fitte for the ſervice, he intended. Reiecting therefore multitudes, and confuſed threatnings of barbarians, and furnitures of armes guilded, and ſette with precious ſtones, as being a pray for the conqueror, and noe aſſurance for him, that weares them, hee brought in the Roman ſwords, and cauſed long heavy targets to bee framed, and choſe horſes, rather that were already managed, and made fitte for ſervice, then thoſe, that were richly trapped and garniſhed. So farre Plutarch. *The ſouldiers care therefore ought to bee firſt for ſureneſſe, then for fitneſſe, laſtly for comelineſſe and ornament in armes. If the two firſt faile, the laſt availeth litle, and will proue rather a burden, then a defence. And thus much of armes in generall: Nowe followe the particulers of armes, as they are in Ælian.*

1 Preparacions abſolutely neceſſary for warre] *The preparacions, whereof Ælian ſpeaketh, are ſo neceſſary, that without them noe warre can be made or continewed. For purpoſing to fight by water you muſt haue ſhippes, by land, you muſt haue foote, and horſe. For which, if you prouide noe armes, you put them into the field not to fight, but to bee ſlaughtered. The manner of fight in the field is not of one ſort. Some time celerity is needfull, to attempt or prevent the enemy: ſometime a ſlowe and ſure proceeding, leſt, with to much haſt, wee be ouertaken our ſelues. Therefore the divers arming of ſouldiers, ought to be ſuch, that they may ſerue for all occaſions, and vſes, and that wee may employ alwayes to ſervice ſuch, as by reaſon of theire armour, ſhall moſt fitte our purpoſe. Wherefore* [a] *Iphicrates fittly reſembled an army to a mans body:* calling the heavy-armed the body, the light-armed the hands, the horſe the feete, and the Generall the head: *and as, if any of the reſt were wanting, the army ſhould bee lame, and halted, ſo if there want a Generall, it is vnprofitable, and of noe vſe. The heavy-armed are the body, which giue life and foode, as it were, to the reſt: and to which the reſt being diſtreſſed, retire.* The light-armed *are the handes, which vppon euery occaſion being put out to gripe and take hold vpon the enemy, are drawen in againe, when it is expedient. The* horſe, *as feet, moue with celerity: the* Generall *is the head, that ruleth, that watcheth, that careth for the reſt, directing the times of theire motion, and of their reſt. So then the whole force of the field conſiſteth of horſe, and foote. And the foote are reparted into three kindes.*

[a] Plutarch in Pelopida. Polyen. l. 3 in Iphicr § 22 Leo ca. 20 §. 193

1 Armed, Targetiers and light-armed] *Theſe ſeuerall kindes of ſouldiers were vſed by all the Græcians, eſpecially by the* [b] *Athenians, Lacedæmonians, and Thebans, whoe were the mightieſt, and the moſt warlick people of Greece. Alexander had them in his army againſt Darius.* [c] When Alexander, ſaith Arrian, came to the place, where Cyrus (with whom Xenophon was) encamped, and ſawe the ſtreights of Cilicia poſſeſſed with a ſtrong gard, hee left Parmenio with the heavy-armed, to ſtay behind, himſelfe about the firſt watch taking with him the Hypaſpiſtes, archiers, and Agrians, marched on toward the ſtreights in the night. *The armed were left with Parmenion, himſelfe tooke with him the* Hypaſpiſts (*targetiers* archers, and Agrians: [d] *Theſe Agrians were darters on foote. The like is to be found in divers other places of Arrian.* [e] *Pyrrhus allſo, that followed the Macedonian manner in arming his ſouldiers, had the ſame diviſion of armes.* [f] *And Philip King of Macedony ſonne of Demetrius.* [g] *And Antiochus, that warred againſt the Romans.*

[b] Thucyd. lib. 4. 315. B.C.

[c] Arrian. li. 2. 32. B.

[d] Arrian. li. 1. 14 E.

[e] Plutarch. in Pyrrho.

[f] Polyb li. 4 338 B

[g] Appian in Syriac 107. D.

2 The armed beare the heavieſt furniture] *This heavy furniture appeareth not by deſcription of the armes, which Ælian giveth them: which are a Macedonian*

target, and a pike onely. [a] Iphicrates, beſides the target (leſſe, then the Macedonian target) which he armed his Targetier withall, gaue him both a pike & a linen curace: So that if the Macedonian armed bore noe more then a Target and a pike, his armes ſhould be lighter, then Iphicrates his Targetier, who had a target, a pike, & a linen Curace. It hath been the manner of ſome Nations to beare targets alone without Curaces. So did the Egyptians in [a] Xenophon: So the Gaules in [b] Pauſanias. There are againe, that haue born Curaces without Targets: as Phorcys the Phrygian in Homer: of which kinde of Curace, becauſe it ſome what reſembleth the Curaces of our time, I will reherſe the deſcriptiõ out of [c] Pauſanias. There lay vpon the aulter, ſaith hee, a braſen Curace, the forme whereof agreeth not with the vſe of our times, but of old it was common. It had two plates of braſſe, one fitte for the breſt and the belly, the other to cover the backe. That before was called *gyalon* (the hollow part) that behynd *Proſegon* (becauſe it was added to the other.) They were faſtened together with buttons behinde. It ſeemeth to bee a ſufficient defence for a mans body without a Target. Therefore Homer maketh Phorcys the Phrygian to fight without a target, becauſe he wore ſuch a Curace. *But yet, that it was not the manner of the Macedonian armed to beare pike & target alone, may be plaine many wayes. First* [d] *Polyen giueth them headpieces, & greues, and targets, and pikes. Then doubt I not but they were as well armed as the reſt of the Gracians, within whoſe Panoplia Curaces were comprehended as* [e] *S. Paule teſtifieth rekoning as parcels of the Panoplia, a Curace, a target, & a headpiece. Now that the Macedonians had alſo their Panoplia (full or compleate arming) is to be fownd in* [f] *Diod. Siculus. Where alſo Choragus the Macedonian (whom Q. Curtius calleth Horatas) is ſaid in the fight betwixt him & Dioxippus to be fully armed.* [g] *Leo deſcribeth the Panoplia of the Macedonians after this manner.* Alexander, ſaith hee, armed his Macedonians with a large target, a ſword, a head-piece, greues, vambraces, and a long pike. *Philopæmen (as is before reherſed) reducing his Achæans to the Macedonian arming, bringeth them to Curaces, headpieces & greues. The names alſo, that are attributed to the* Armed, *ſhew, they were otherwiſe armed.* [h] *Plutarch calleth them Pephragmenos, & Cataphractos, as having their bodies all armed & oppoſeth them to Euzoni (light, or naked:) And by* [i] *Vegetius, the armour it ſelf is named Cataphracta, becauſe the whole body is covered there with.* [k] *Xenophon termeth them Thoracophoros bearing Curaces.) Theſe are the ſtrength of the battaile, and a* [l] *ſtrong wall, or rather a fortreſſe of the field, to whom the light-armed, and* [m] *the horſe alſo retire in time of need. As long as they ſtand, the field is not loſt; being defeated, the reſt can make noe reſiſtance. Being armed with a ſingle* target *without other armes, they incur the ſame daunger, that the Romans in Gratians time did, whoe for want of Curaces were entierly deſtroyed with the arrowes of the Gothes. Wherefore, it ſeemeth, Ælian heer pointeth at the principall armes onely of the armed Macedonian. For after ward diſcourſing of the light-armed, he ſaith, they neither had Curace, nor greue, nor long or round target: implieng thereby, that the armed had them all.* [n] *So Livy, comparing the armes of the Romans and Macedonians together, ſaith noe more, then, that the Macedonians were armed with a round target and a pike, the Romans with a long target, and a darte, called* Pilum; *when himſelf had* [o] *before declared, they had headpieces, Curaces, and greues.*

[a] Aemilius Probus in vita Iphicrat.

[b] Xenoph. Cyr. lib 7. 178 A

[b] Pauſan. in Phocicis 648

[c] Pauſan. in Phocic 660

Gyalothorax.

[d] Polyen li. 4 in Philipp. § 10

[e] Ad Epheſ. cap 6 v 14

[f] Diod Sicul. lib 17, 619 & 615

[g] Leo cap 6 § 25 & 35 37

[h] Plut. in Timol.

[i] Veget. l 1 ca. 20

[k] Xenoph. Cyr. 167 C

[l] Veget. li. 1 cap 20

[m] Died. Sicul. lib 18

[n] Lixy lib 9. 248 C

[o] Livy lib 1. 27 C

3 Vſing targets after the *Macedonian* manner] *Targets were of two ſortes, round targets, and long targets. Long targets were called* Thureo, *and were in forme like a doore, from whence they had their name. For* Thura *ſignifieth a doore. Theſe the Romans, and Gaules vſed, albeit ſome what different in forme. The* [p] *round had eight full handfulls in diameter, as Ælian ſaith, and were termed Aſpides. Long targets were much diſliked by the Gracians. Cyrus in Xenophon derideth them,*

[p] cap 12

as

as both hindering the sight, & being vnwieldy:[a] and Philopœmen chaunged them into round targets following the Macedonian manner. The targets of Philopœmē[b] Pausanias termeth Argolican targets; It may be because they were first vsed by the Argines in the battaile betwixt[c] Acrisius Danaes father, and Praetus, who contended about the kingdome of Argos.

Of what matter these targets were, is a question. Some take them to haue been made of other matter, & covered over with brasse: & that otherwise the souldier should not haue been able to haue born them for the weight. I deny not, that in auncient time some targets were plated with brasse: the rather, because I find, that Alexander to match the Indian pompe covered the targets of his souldiers with plates of silver. But, that the ordinary Macedonian target was so covered, I deny.[d] Ælian after calleth them chalce (braſen) not epichalce (covered with brasse.)[e] Polyb. saith, that the Macedonians in the time of K. Philip the sonne of Demetrius were called Chalcaspides (Braſen targetiers) not epichalkitai, by which name, as Hesychius hath, they were called, that had their targets covered with brasse. So like wise[f] in the time of Perseus. And the Megapolitans, whoe imitated the Macedonian manner of arming, are termed Chalcaspides[g] in Polybius: I haue shewed, that the Lacedemonians had[h] braſen targets by the institution of Lycurgus: & that, in the time of the Heroes almost all armour was made of brasse. [i] The targets of the Lacedemonians that were slaine at the battaile of Leuctra were brasse, and to bee seene in the time of Pausanias: and the braſen target[k] of Pyrrhus, Which he left at Argos, being there slaine, was kept in the temple of Ceres. As for the weight, it is not so great but it may become light enough by vse, and exercise. Wee see iron targets in vse at this day, and not hard to be borne. And albeit the weight bee not for euery mans strength, yet since it hath beene, and is, the manner to make choice of souldiers, and to fitte them with armes according to the ability of their bodies, I see noe reason, but the stronger sort might well bear them. Another sort of targets there was which differed from the Macedonian not so much in forme of roundnesse, as in matter, and manner of carieng. They were made of wicker, and borne in the left hand as our bucklers, which wee vsed not long since; and[l] some covered over with hides, some not. [m] Xenophon saith, that Cyrus the elder armed the Persians with these wicker targets: & reckoning vp the nations, through whose Countries the Gracians passed in their returne out of Persia, & describing their armes,[n] reporteth that the Chalybes, Taochi, & Phasians had targets of this kinde. Now, that they were borne in the left hand, is clear by the same Xenoph. [o] Hee writeth thus of the fight betwixt Cyrus & Crœsus: The Egyptians & Persians encountring together, the fight was hard, & sharpe: & the Egyptians aswel in number as in armes, had the advantage. For they fought with stiffe, long pikes, & theire large targets better covered their bodies, then Curaces, or wicker targets, and being borne on their shoulders availed to joint-thrusting foreward. Serring therefore their targets close, they advaunced, & ranne on. The Persians were not able to endure the shock, by reason they bore theire wicker targets at the armes end, but retiring by litle, & litle, & giving, & taking blowes, they mainteined the fight till they came to the Engins. So farre Xenophon. Out of which words a man may plainely vnderstand the manner af bearing these wicker targets, which by reason of lightnesse might easily bee held out at armes end. And as the Egyptian target, which reached downe to the foote, must needes bee heavy, and therefore had need of the shoulder to support it, so was it with the braſen targets of the Macedonians, which were also weighty, by reason of the matter, they were made of. These therefore were like wise caried on the shoulder. Plutarch witnesseth it in the life of Æmilius. And the same Plutarch rehearseth that Cleomenes the King of Sparta taught his Lacedæmonians, in steede of a speare, to vse a pike with both handes, and to beare their targets

a Polyen. li. 6 in Philopœ. §. 3 & Plut. in Philopœ.
b Paus. in Ar. cad. 431.
c Pausan. in Corinthiacis 131 & Plin. nat. hist. l. 7. cap. 56
d cap. 12
e Polyb. l. 2. 150 B & lib. 4. 331 A & 332 C
f Plut. in Aemilio
g Polyb. l. 2. 150 E & 332 D lib. 4
h Xenop. de rep. Laced. 681 E
i Pausan. in Beoticis 560
k Pausan. in Corinth. 123
l Xenoph. de Xp. Cyri 352 A
m Xenoph. Cyr. lib. 2. 40 B
n Xenop. de Xpe. Cyr. lib. 4. 336 B
o Xenoph. Cyro. lib. 7. 177 B.

δι' ὀχάνης, μὴ δὲ διὰ πόρπακος.

targets vpon the strappe *not by* the handle. *The wordes are obscure, & need light, which I will giue as shortly, as I can. I find three wordes emongest the Græcians, all perteyning to a target. They are those* Telamon, ochane, *or ochanon, and* porpax. Telamon *in this sence (for it signifieth otherwise a band) is by all confessed to bee the broade strappe, which is fastened to the handle of the target, & holdeth the target being cast about the necke, vnto the back of* Ochane, *&* porpax *is some variance.* [a] *Suidas saith that Ochanon is* τὸ κράτημα τῆς ἀσπίδος. The hold of the target [b] *Hesychius calleth it* the Porpax of the target, & the band, ὁ δεσμος. Of Porpax [c] *Hesychius saith* it is the handle of the target, *& taketh* Porpe *in the same sence*, making it the thing bearing vp the targett into which the hand and arme to the elbow is thrust. [d] *Suidas saith,* Porpax is it, that they hold the target by; which is called ochanes: *& againe,* that some take it for the band of the target; *other some* for the middel iron that goeth through the target, on which the souldier taketh hold. *So that both Hesychius, & Suidas agree, that* Ochanon *&* Porpax *are sometime alone, and signify* the handle of the Target. *In which sence* [e] *Herodotus &* [f] *Pausanias take* Ochanon *also. Hesychius further interpreteth it for the band of the target* (ὁ δεσμος) *which signification better agreeth with the meaning of Plutarch, who maketh an apparant difference betwixt thē, reporting that Cleomenes taught the Lacedemonians to cary their targets, by the* Ochane, *not by the* Porpax. *When he saith by the* Ochane, *hee meaneth by the strappe, by which, being fastened about the necke, the target is throwne over to the back, & resteth vpon the left shoulder. That, which I say, will better appeare, if we marke, what the Lacedemonians did before, & what Cleomenes adviseth them vnto. Before they caried a speare in the right hand, and a target by the handle in the left, so that both their hands were ful. The speare was not able to match the enemies pike (for* [g] *Cleomenes had often to doe with the Macedonians & Achæans, whoe both vsed pikes) & pikes, the Lacedemonians could not wield, with one hand; So then, to giue them liberty of both hands, he counselled thē to cary their targets at theire backs by the strappe or* Ochane *(which was the Macedonian manner) and not to hold them any more by the* Porpax *or handle; and so to free their left hand, to apply both to the menaging of a pike. This I take to be the direct meaning of Plutarch: Cleomenes then perswaded them to leaue theire speares, & take pikes. And lest the target in the left hand might proue an impediment to the vse of a pike, hee thought best they should cary them at their backe by the* Ochane. *To cary them then by the strappe at the backe is to giue free vse to the left hand, without which a pike, specially a long pike, such as Cleomenes advised them vnto, cannot be wielded: as experience will teache any man, that list to make triall.*

a Suidas in Ochano.
b Hesychius in Ochano
c Hesychius in Porpax,
d Suidas in Porpax.
e Herodotus li. 1, 34
f Pausan. in Eliacis 340
g Plutarch. in vita Cleomenis

4 And long pikes.] *Pikes for the most parte haue beene called by two names by the Græcians;* Doru, *and* Sarissa. *Ælian nameth them* Dorata *both heere, and in other places of this book.* [h] *Xenophon, speaking of the weapons of the Chalybes, saith they had* Dorata *of 15. cubits long; armed with iron at one end onely. Yet is* Doru *taken for a speare oftentimes, as in that place of* [i] *Plutarch last recited where Cleomenes perswaded the Lacedemonians to chaunge theire* Dorata *(speares) into* Sarissas *(pikes.) The like recounteth hee of* [k] *Philopœmen, whoe chaunged the speares of the Achæans into pikes, calling the speares,* Dorata, *the pikes,* Sarissas. *And even in this place Ælian termeth them not* Dorata *simply, but with addition of* Perimekestera, *of a long sise. And after describing the armes of the* Peltastes *hee saith their speares* (Dorata) *were much shorter then the pikes* (Sarissæ) *of the armed. Properly the pike of the Macedonian is termed* Sarissa; *if sometime* Doru, *some other word is added to avoide the ordinary signification of* Doru; as Doru macron [l] *in Xenophon,* Doru perimekes *in Ælian. Yet deny I not, but it may bee called* Doru *of the matter. For* Doru *signifieth wood of any kinde: and*

h Xenoph de exped. Cyr lib. 4 338, c
i Plut in Cleom.
k Plut. in Philo.
l Xenop. de exp. Cyri.

by

by consequent the wood, a pike is made of. But, as I said, the Macedonian pike is properly called Sariſſa. *What the length of this pike was, Ælian will ſhewe in the 14. Chapter. And for the wood it was made of, I take it to haue beene Corneil. For I finde that the Macedonian horſemans ſtaffe was of that wood.* [a] *Arrian confirmeth it, ſaieng:* And nowe the Macedonians had the better both by reaſon of the ſtrength of theire bodies, and experience in warre, and alſo becauſe they fought with Corneil launces againſt Iavelins. *For I aſſent not to the tranſlater of Arrian whoe turneth* Xyſtois Craneinois *into Corneil dartes, where it ſhould bee Corneil launces. For in that place Alexander is reported to haue fought with a launce, and to haue broken it in fight, and to haue asked another of Aretes, one of the Quiries of his ſtable, whoe had alſo broke his, and fought with the truncheon, and to haue taken the launce of Divarates the Corinthian, and returned preſently to the fight, and therewith overthrowne Mithridates the ſonne in lawe of Darius. Beſides it is ſaid, that the Macedonians had the advantage in weapons; Take it thus, that they fought with dartes againſt Iavelins, what advantage had they? eſpecially being come to the ſhock: Dartes are vſed a farre of. At hand noe man fighteth with them, vnleſſe hee haue noe other weapon. I thinke noe man will deny, but that a Iavelin in cloſing is more advantagious then a darte. And that* Xyſton *ſignifieth a launce Ælian himſelfe teſtifieth in this Chapter calling the launciers* Doratophori, *or* Xyſtophori. *The Macedonian then had his horſemans ſtaffe of Corneil. Which* [b] *Pliny affirmeth to bee a ſound and a faſt wood. If his launce: a man may probably coniecture, his pike alſo, which exceeded the launce in length and thickneſſe onely. Wee at this day preferre the* Aſhe *before all woodes for toughneſſe, lightneſſe and beautie; eſpecially if the vaine runne through to the end. Notwithſtanding I finde in* [c] *Cicuta a knight of Venice, an old ſouldier, and one that followed the Emperour Charles the fift in his warres of Africk, that the opinion of his time enclyned rather to* Firre *both for lightneſſe, and ſtrength. I haue not ſeene the experience: therefore leaue I the iudgement to triall. Wee haue then out of Ælian that the* armed *had both target and pike, that one man ſhould at one time vſe both target, and pike in fight, againſt the enemy will ſeeme incredible in our dayes. Yet vſed the Macedonian ſouldiers both; at one inſtant they both charged theire pikes, and covered themſelues with theire targets againſt the flyeng weapons of the enemy. The manner was this: when they cloſed with the enemy, they charged theire pikes with both handes, and with a ſlight wryeng of the body, and lifting vp the right ſhoulder, whirled their target, hanging at their backe, vpon the left ſhoulder, that ſtood next the enemy in the charge: and ſo covered all theire body to the midle, and beneath. I haue touched it in the practiſe of Cleomenes. It appeareth more plainely in Plutarch, deſcribing the battaile betwixt K. Perſeus, and the Conſul Æmilius. Hee hath this:* [d] The enemy approaching Æmilius iſſued out of his Campe, and fownd the legionary Macedonians, bearing nowe the heades of their pikes ſtiffe vpon the targets of the Romans, not ſuffering them to come vp to the ſword: which when hee ſawe, and ſawe with all the other Macedonians caſting about their targets from behinde their ſhoulders, and receiving the Roman targetiers with their pikes abaſed together at one ſignal, and likewiſe the firmeneſſe of the battaile ſhutte vp, & ſerred, & the roughneſſe of the front (the pikes lyeng out before) he became aſtonied, & affrighted, as having never before beheld ſo fearefull a ſight. Which paſſion, & ſpectacle, hee afterward oftentimes recounted to his familier friends. *This ioyning of targets in the front is called* Synaſpiſmos: *whereof wee ſhall haue occaſion to ſpeake heere-after.*

[a] Arrian. lib. 1, 15, 8

[b] Pliny natur. hiſtori. lib. 16. cap. 40

[c] Aurel. Cicuta de diſciplina mil. lib. 2, 21, 8

[d] Plutarch. in Æmilio.

5 The

5 The light.] *They had divers names given them in the Greek history. Sometimes they are called* [a] Euzoni, *becauſe they ſo girded vp theire apparaile about the, that they were light and fitt for motion: Sometimes* [c] Askeuoi, *becauſe they beare no military furniture of defence: Sometimes* [d] Elaphroi *becauſe they reſemble (as ſome think) a harte in lightneſſe, and ſwiftneſſe: Sometimes* [e] Gynnietæ *(naked) becauſe they were without defenſiue armes: Sometimes* Pſyloi *(naked or light) as they are heere termed by Ælian and by* [g] *Appian, and the other, that I cited.*

6 Flyeng weapons onely] *The light-armed are diuided into three kindes,* Archers, Darters, *and* Slingers. *Which three kindes were of much vſe emongeſt the Græcians, and they beare onely flieng weapons.* [h] *Xenophon teſtifieth that Cyrus the elder had them:* [i] *And the Græcians in theire returne out of Perſia:* [k] *Alexander had them in his warre againſt Darius: and* [l] *Pyrrhus in his warre in Italy, Sicill and Greece:* [m] *The Græcians againſt Brennus King of the Gaules:* [n] *Both the Athenians & Thebans at the battaile of Deles.*

7 Arrowes] *Archers haue alwayes beene of ſpeciall eſteeme for the field, and preferred before the other kindes of light-armed. Many nations haue beene commended for theire skill in ſhooting. Emongeſt the Græcians the Cretans were (of auncient time) ſole archers,* [o] *as Pauſanias witneſſeth. Yet was not theire ſervice æquall with the ſervice of the Perſians. For Xenophon confeſſeth, that the Perſian bowe overreached the Cretan a great way: and that the Rhodians with theire ſling owt-threw the Cretan bow. Of the Cardichans a people, through whoſe Countrey the Græcians paſſed at theire returne out of Perſia* [p] *Xenophon writeth thus:* They caried noe other armes, then bowes and ſlinges. They were excellent archers; and had bowes well nighe three cubits long; arrowes more, then two Cubits. When they ſhotte, they drewe the ſtring, applieng theire hand ſome what toward the neither end of the bowe, ſetting theire left foote foreward. With theire arrowes they pierced both targets, and Curates. The Græcians putting thonges to the middeſt of theire arrowes ſent them back at the enemy in ſteede of Dartes. *The ſame in effect is reported by* [q] *Diodorus Siculus. Of the Parthian horſemen, Appian ſaith:* When Craſſus commaunded the light-armed to diſband, & goe to the charge they went not farre, but meeting with many arrowes, and being ſore galled with them, they retired ſtreight, and hid themſelues emongeſt the armed, and gaue beginning of diſorder, and feare, repræſenting to the ſight of the reſt, the force, and violence of the ſhotte, that rent all armes, they fell vpon, and made way aſwell thorough bodies, that had the beſt, as the worſt furniture defenſiue: giving mighty and violent ſtrokes from ſtiffe and great bowes, and forcing out the arrowe boiſterouſly with the compaſſe, and bent of the bowe. [r] *Plutarch hath the very wordes, that are in Appian. The Indians alſo were good* archers, *albeit not much praiſed by* Q. *Curtius,* [ſ] *Hee ſaith:* theire arrowes were two Cubits long, which they deliver out of theire bowes, with more labour, then effect: for as much as the arrow, whoſe whole efficacy is in lightneſſe, becometh altogether vnwieldy by reaſon of the weight. *And yet hee telleth, that Alexander,* at the aſſault of the principall City of the Mallians, was ſtrooke thorough his Curace into the ſide beneath the pappes with an Indian arrowe: *with whome* [t] *Plutarch and Diod. Siculus accord.* [v] *Arrian addeth* the wound was ſo deep, that his breath was ſeene to iſſue out together with his blood. *The Gothes and other people of the north, that invaded the Roman empire, had theire chiefe victories againſt the Romans by the help of bowes, and arrowes.* [x] *Vegetius (before alleaged) ſpeaketh it plainely:* So our ſouldiers, *ſaith hee,* vnarmed both

a Polyb. l. 3, 263 B. Athen. dipnoſoph. li 5, 194, D. Xenoph. de exped. Cyri. lib. 3, 306, B.
c Pauſan. in Arcad. 535.
d Xenoph. de exped. lib. 3, 306, B & lib. 4, 322, C.
e Xenoph Cyro. lib. 7. 189, C.
g Appian in Par. 144.
h Xenoph. Cyr. lib 7, 188, B.
i Xenoph de exped. lib 3 306 B, & lib 4, 326, A
k Arrian. lib. 1, 31, E.
l Plutarch. in Pyrrho.
m Pauſan. in Phocicis 648.
n Thucyd. lib. 4, 325, B.
o Pauſan. in Atticis. 40.
p Xenoh de exped Cyri. lib. 4. 322, C.
q Diodor. Sicul. lib. 14 341.
r Plutarch. in craſſo
ſ Curtius lib. 8 358.
t Plutarch in Alexand. Diod. ſicul. lib 17 614
v Arr. l 6 129 E
x Veget. lib 1 c 20.

both bodies and heads, encountring with the Gothes, were oftentimes wholy defeated, and slaine, with the multitude of theire arrowes. *I may not pretermitte the praise of our nation in this skill. Our owne stories testify, that the great battailes, we gayned against the french, were gayned by the ioint-shooting of our archers principally. And that the English haue heretofore excelled in archery & shooting, is cleere by the testimony even of Strangers.* [a] *Cicuta (whom I named before) commending the vse of bowes, as necessary for the service of the field (& that long after gunnes were invented) præferreth the English before all other, and setteth him downe, as a patterne for other to follow. And* [b] *Patritius, disputing of the violence of arrows, doubteth not to affirme,* that an English arrowe with a litle waxe put vpō the point of the head, wil passe through any ordinary Corslette or Curace. *Howsoever the credit of bowes is lost, at this present, with many great souldiers, yet haue they of auncient time been highly prised.* [c] *Vegetius saith*; how great advantage good *archers* bring in fight, both Cato in his bookes of military discipline doth shewe evidently, and Claudius, by augmenting the number of *archers*, and teaching of them the vse of theire bowes, overcame the enemy, whome before hee was not able to matche. Scipio Africanus (the yonger) being to giue battaile to the Numantines, that before had forced a Roman army to passe vnder the yoake, thought hee could not otherwise haue the better, vnlesse hee mingled chosen archers in euery Century. *And* [d] *Leo the Emperour in his Constitutions military hath this Constitution emongest other:* You shall commaund all the Roman youth, till they come to fourty yeares of age, whether they haue meane skill in shooting, or not, to cary bowes & quivers of arrowes. For since the *art of shooting* hath been neglected, many, & great losses haue befallen the Romans. *And in another place* [e] you shall enioyne the Commaunders vnder you, in winter to take a view, and to signify to the *Turmarches* (Coronells) how many horse, & what kinde of armes the souldiers, vnder their commaundes, stand in need of, that necessary provision bee made, & the souldiers be furnished in time convenient. But specially you are to haue care of *archers*; & that they, whoe remaine at home, & haue vacation from warre, hold bowes and arrowes in their howses. For carelessnesse heerin hath brought great dammage to the Roman State. *So Leo. This of ould time was the opinion of the Romans concerning* archers. *Howe wee are fallen out with them in our dayes (the skill of the bowe, being a quality so commendable, and so proper to our nation) I knowe not, vnlesse fire-weapons perhaps haue put them out of countenaunce. And surely it may not bee denied, that the force of fireweapons of our time doth farre exceed the height of all old inventions for anoyeng the enemy. And, when I haue given them the first place, I will not doubt to giue the second to bowes and arrowes: being so farre from casting them of, that I would rather follow the wisdome of the Græcians; whoe albeit they esteemed arrowes the best flieng weapons, yet thought it not amisse to hold in vse slinges, and dartes. Every weapon hath it property; and that which is fitte for one service, is not so fitte for another. The fireweapons haue theire advantages; They haue also theire disadvantages. Theire advantage is, they pierce all defence of armour, and lighting vpon a place of the body, the wound whereof endaungereth life, they bring with them certeine death. Theire disadvantages are, they are not alwayes certeine, sometimes for want of charging, sometimes through overcharging, sometimes the bullet rowling out, sometimes for want of good powder, or of dryed powder, sometimes because of an ill dryed matche, not fitte to coale, or not well cocked. Besides they are somewhat long in charging, while the* musketier *takes downe his musket,* vncockes *the matche,* blowes, proynes, shuttes, casts *of the pan,*

[a] Aurel. Cicuta de disciplin milit. lib. 2. 206.

[b] Patrit. Parall. parte secunda li. 3 pag 37.

[c] Veget. lib. 1 ca. 15.

[d] Leo cap. 6. §. 5

[e] Leo cap. 11. §. 49.

 castes

caſtes about the musket, opens his charges, chargeth, drawes out his skowring ſticke, rammes in the powder, drawes out againe, and puts vp his skowring ſtick, layes the musket on the reſt, blowes of the matche, cockes, and tryes it, gardes the pan, and ſo makes ready. All which actions muſt neceſſarily bee obſerved, if you will not faile of the true vſe of a muſket. In raine, ſnowe fogges, or when the enemy hath gayned the winde, they haue ſmall vſe. Adde that but one ranke (that is the firſt) can giue fire vpon the enemy at once. For the reſt behinde, diſcharging, ſhall either wound theire owne Companions before, or elſe ſhoote at random, and ſo nothing endaunger the enemy, the force of a musket being onely availeable at point blanck. Contrary wiſe the diſadvantage of arrowes is in the weakneſſe of the ſtroke, which is not able to enter a Curace, that the foote or horſe nowe vſe. Yet can noe weather bee founde, where in you may not haue good vſe of bowes: raine, ſnowe, winde, haile, fogges, hinder litle (eſpecially the ſtring of the bowe being not to wette) may rather profit Becauſe in them you can hardly diſcerne, much leſſe avoide, the fall of the arrowe. As for quickneſſe in delivery the bowe farre excelleth the musket. A good ſingle archer is able to giue fiue ſhotte in exchaunge for one of the musketier; and that with ſuch certainty, that you ſhall not heare of an archer that miſſeth the delivery of his arrow, where the musketier, often fleſh by reaſon of the accidents and impediments before by mee rehearſed. Ioine that a whole ſquadron of archers, being embattailed, may ſhoote at once together: which onely the firſt ranke of musketiers may doe. And make the caſe there were a hundred musketiers, and a hundred bowe-men eche digeſted into ten files, eche file conteyning ten men, the bowe men ſhall bee able to ſhoote at once a hundred arrowes (all theire arrowes) for ten bullets given by the musketiers, namely thoſe ten of the firſt ranke diſcharging alone. It muſt not bee pretermitted, that the bowe and quiver both for marching, & all ſervice, are lighter and of leſſe labour to vſe, then a musket, which is noe ſmall advantage in armes and fight. To conclude the bowe-men may bee placed behinde the armed foote, and yet in ſhooting over the Phalange anoy the enemy before ioyning, and[a] all the time of fight, even whileſt they are at puſhe of pike; where the musketier, there placed, muſt either idlely look on, or elſe playeng with his musket, moſt of all endaunger his owne friendes. Neither is the force of arrowes ſo weake, as is immagined, noe not in the arming of our dayes. For the pike albeit hee haue his head and body covered, yet are his legges, and feete, his armes, and handes open to woundes: any of which parts being wounded bringes a diſability of ſervice. To ſay nothing of his face, and eyes, before which the ſhowers of arrowes falling like a tempeſt without intermiſſion, muſt needes breed a remedileſſe terrour, and make him thinke rather of ſaving himſelfe, then offending his enemy. The musketier being alſo vnarmed is as ſubiect to the ſhotte of arrowes, as the archer is to the ſhotte of the musket; and the arrow touching any vitall parte, as much taketh away life, as doth the musket. Laſtly a horſe-man for his owne perſon (I muſt confeſſe) is ſafe enough from the daunger of arrowes by reaſon of his armour but his horſe, being a faire and large mark, and having neither barbe, nor pectorall, nor ought elſe to hide his head or breaſt, how can hee eſcape woundes? Witneſſe our fieldes in France, where our Archers alwayes beate the frenche horſe, being barbed, and better armed, then our horſe are, at this day. And for the bloudy effect of bowes the ſtory of Plutarch is worth the reherſing. He, in the life of Craſſus hath thus:[b] The Parthians oppoſing the Cataphracts againſt the Roman horſe, the other Perſians galloping heer and there diſperſedly, and troubling the face of the field, broke vp from the bottom, hills of ſand, that raiſed infinite duſt, whereby the Romans loſt theire ſight and voice: and thronging together, & thruſting one another were wounded, and died not a ſimple, or quicke deathe, but tormented with convulſions

[a] Plut. in Sylla.

[b] Plutarch in Craſſo.

convulsions and panges of grief, wallowing vp, and downe, in the sande to breake the arrowes in theire woundes, or elsse endevouring to pluck out the hooked heades, which had pierced vaines and sinewes, renting a freshe themselues, & adding torment to torment: so that many died in this manner, & the rest became vnprofitable. And when Publius Crassus desired them once more to charge the Cataphracts, they shewed theire handes nailed to their targets, and theire feete fastened to the grownde, whereby they were vnable either to fly, or fight. *These wonders did the Parthian bowes, which notwithstanding were not to bee compared to our auncient Englisch bowes, either for strength, or farre shooting. And that wee may not seeme to rely vpon antiquity alone.* [a] *The battaile of Curzolare (commonly called the battaile of Lepanto) fought in our dayes betwixt the Turkes, & Christians by sea may serue for an experience of the service of bowes and arrowes. In which there died of the Christians by the arrowes of the Turkes aboue fiue thowsand, albeit they were in galleyes and ships, and had theire blindes pretended to saue from sight, and mark of the Turks, where as the artillery of all sorts of the Christians consumed not so many Turkes: notwithstanding the Christians had the victory. Nowe then for vs to leaue* the bowe, *being a weapon of so great efficacy, so ready, so familiar, and as it were so domesticall to our nation, to which wee were wont to bee accustomed from our Cradle, because other nations take themselues to the Musket, hath not so much as any shewe of reason. Other nations may well forbeare that, they never had. Neither Italian, nor Spaniard, nor Frenche, nor Dutche, haue these fiue hundred years, been accounted* Archers. *It was a skill almost appropriated to our nation. By it, wee gayned the battailes of Cressy, of Poitiers, of Agincourt, in France: of Navarre, in Spaine: By it, wee made our selues famous over Christendome. And to giue it ouer vpon a conceit onely (for noe experience can say that our bowe was ever beaten out of the field by the musket) will proue an immitation of Æsops dogge, whoe carieng a piece of flesshe in his mouth ouer a river, and seing the shadowe in the water, snatched at the shadowe, and left the flesshe. I speake not this to abase the service of muskets, which all men must acknowledge to bee great; I onely shewe, there may bee good vse of* bowes, *if our archers were such, as they were wont: which is not to bee dispaired, and will easily come with exercise.*

[a] Patric. paral. mil. part. 2. 39

8 Dartes] *The names of* dartes *are divers in the Greek Story. A* Darte *is often called* Acontion: *and thereof cometh* Acontizo, *to throwe a* darte, *and darters are called* [b] Acontistæ. *So doth Ælian heere terme a* darte. *Sometimes a darte is termed* Palton *of the verbe* πάλλω *signifieng to shake or make quiver. The word* Palton *is much vsed in* [c] *Arrian and* [d] *Xenophon especially, when they speake of the Persian* dartes. *Yet* [e] *Diodorus Siculus nameth the Persian darte* Saunion: *which name also is given to a Græcian darte by Plutarch, and by the same Diodorus. Sometimes a* darte *is named* Doration: Doru, *as I said, being a* Speare, *and* Doration *according to Suidas, a litle speare, or darte. Ælian vseth the word in this Chap.* Lonche, *albeit it properly signify the* [f] *head of speare, or darte, yet doth it sometimes signify the darte it selfe. So is it taken in* [g] *Xenophon, when hee telleth, that flieng weapons began to walk on all sides,* λόγχαι, *(that is dartes) arrowes, and stones out of slinges, and some out hands. And Diodorus Siculus hath* [h] ἀκοντίζειν τὰς λόγχας, *to throwe dartes, even in the actes of Alexander. Yet wee finde that speares were also cast vnder that name, and Xenophon saith, that the Thebans cast* Dorata *against the Lacedæmonians. The* Darte *hath beene in vse emongest all nations. The matter, fashion, and force of the Roman darte may bee seene in* [k] *Vegetius, and in* [l] *Lipsius his Commentaries* ad Polybium. *The manner of the darting of the Macedonian armed appeareth in the fight betwixt Choragus, and Dioxippus before by mee mentioned: where wee find that Choragus cast*

b Xenop de exp. Cyri, lib. 3. 306. C
c Arr. lib 15, F
d Xenoph Cyr. lib. 79 D. lib. 4. 100. B & 108 C
e Diod Sicul. lib. 17. 572 & lib. 14 411 v. Iul Poll. l. 10 c. 31. pag. 491
f Xenoph. de exped Cyri l. 5. 352 A. lib de venatione 991 E
g Xenoph. de exped. Cyri lib. 5. 352. C
h Diod. Sicul li. 17 607 & 615.
i Xenoph. Hist. græci li 5 575 D.
k Veget. li. 2 ca. 15.
l Lipsi. ad Polyb. lib. 3. dialogo 1.

first τὴν λόγχην [a] (Lanceam *saith Curtius*) *at Dioxippus, when hee thought him with in his reache. But the* darters, *heere spoken of, are of the light-armed. Such were the* [b] *Agrians in Alexanders Campe, whoe in all attempts of speed were imployed by Alexander, and served to purpose by reason of theire lightnesse. The* darte *of the Græcian was a slender shaven piece of wood, about three foote long, armed at one end with a head of iron with a sharpe point, to the end to pierce, whatsoever it should fall vpon. For the length, I giue, it differeth not from the Roman darte in Polybius: and Xenophon seemeth to affirme it, when speaking of the arrowes of the Carduchans,* [c] he saith they were longer, then two cubits, *& addeth,* the Græcians sent them backe againe at the enemy in stede of *Dartes. About the middest of these* dartes *they fastened a thong, which was called* ἀγκυλον, *wherein, inserting theire forefinger, they launced the darte with more facility. Xenophon witnesseth it in the same place, and in another place hee saith,* [d] Xenophon commaunded the targetiers to marche with theire fingers in the thonges of theire dartes, the archers with theire arrowes nocked, the slingers with their scryppes full of stones, that they might be redy to let fly, when they were commaunded. *These dartes were forcible enough to pierce armoures of that time, and that with them alone* [e] *Iphicrates overthrew and distroyed a whole* Mora *of the Lacedæmonians, which people were accounted the best armed, and the most valiant of the Greekes before the Macedonians came in credit.*

a Curt lib 9 411
b Arr lib 1.7. A.D.& 14 D. & lib 3.61.C
Polyb. li.6.468 E
c Xenoph de exped. Cyri. lib. 4 322. D. & Dicd Sicul. lib 14.411
d Xenoph de exped. Cyri. lib. 5. 347 A.
e Xenoph. Hist. græc lib 5 529

9 Stones.] *There are heere mentioned two manner of throwing stones, the one with the sling, the other with hand alone, The stones, thrown with the sling, fly with much more violence, then the stones throwne with the hand: and, being cast with a skillfull and strong arme, they reache a greater way, then a man would thinke. And yet not so farre, as bullets throwne out of a sling, which by Xenophons report outreached the Persian arrowes. I haue before touched the story: I will nowe lay downe Xenophons wordes.* [f] The Græcians (those ten thowsand, that returned out of Persia vnder the leading of Cherisophus, & Xenophon) had not marched farre, before Mithridates appeared againe with 200. horse, and 400. Archers, & slingers, which were very nimble & light. Hee came close vp to the Græcians as a friend. Being neer, some of his horse, & foote began to shoote, other to sling, & to wound the Græcians. The reare Commaunders of the Græcians were hardly bested. Yet could they doe nothing to anoy the enemy. For the Cretans shoote not so farre, as the Persians, & carieng noe armour of defence, they were faine to hide themselues with in the body of the armed; & the Darters were not able to reache the slingers of the enemy. Xenophon therefore having the rear, thought good to charge and follow the enemy. But hee was not able to overtake them, (for the Græcians had noe horse) & the Barbarian horsemen, shooting backward in theire flight, wounded many of them, that gaue the chace. To remedy this inconvenience Xenophons advice was to provide horse as many, as they could. And hearing, that there were many Rhodians in the Campe, skillful in slinging, whose slings reached twice as farre, as the Persian sling (for the Persians vsed stones, that filled the hand, the Rhodians leaden bullets) hee likewise advised to arme them with slings, and vse theire service. The next day the Græcians furnished out 50 horse, & 200. slingers. And when Mithridates shewed himselfe againe with a thowsand horse, & foure thowsand archers, & slingers, and came vp to charge, both the Rhodian bullets light emongest his troupes, and the 50. horse issuing forth fell vpon the enemy and put him to flight, and slew many of the foote in the chace, and tooke eighteene horse. *Wee may heer note two kind of* slinges *one with the stone, the other with the bullet: and besides, that the Rhodian sling with the bullet over-reached both Cretan, and Persian bowe: which was yet afterward more*

f Xenoph. de exped. Cyri. lib. 3. 306. B

more plainely declared, [a] *when Tissaphernes charging the Græcians with his Persian archers, the Rhodian slinges so terrified him, that both himselfe, and his troopes with drewe. And allbeit hee followed a farre of, yet durst hee noe more approache, but suffered them quietly to marche all that day, and many other afterward. In this arte of slinging, allthough many nations laboured, yet were there very fewe, that excelled. The* [b] *Bible maketh mention of seaven hundred Gybeonites, whose skill was excellent in slinging. Of other nations none might compare with the* [c] *Baleares: of whome Diodorus Siculus writeth thus:* Theire armor is three slinges, whereof they haue one about theire heades, another about theire waste, the third in theire hand. In warre they cast greater stones, then any other, and with such force, that they may seeme to bee sent out of a Catapult. Therefore in sieges and assaults of Cities they wound the defendants of the walles, and in the field breake targets, and head-pieces, and all defensiue armes. They ayme so certeinely at any marke, that they seldome faile in hitting. The cause is theire continuall practise from theire childhode, theire mothers continually enforcing them to sling, even when they are yet children. For setting vp bread vpon a poste, as a marke, they are not allowed to eate, vntill they hitte it, and haue it given them by theire mothers to eate. So farre Diodorus Siculus: with whom [d] Vegetius agreeth. *The same* [e] *Vegetius saith that slinges were made either of flaxe, or of haire, The forme was that it had two ends, the one fastened to the hand, the other to let slippe, being broadest in the middest, least the stone should fall out. Diodorus hath before expressed with what force a stone went out of a sling. Vegetius addeth,* that they are more violent, then any arrowe: piercing head-pieces, Curaces, and other armes. *The same* [g] *Vegetius limiteth the space of theire reache to six hundred foote: and saith,* that slinges at that distance were seene often to hitte the marke: and attributeth as much to archers. [h] *There are, that affirme, that a leaden bullet sent out of a sling will melt with the vehement motion of the aire. Let the credit bee with the reporters. Wee haue not fownd that experiences in our pieces, which notwithstanding force out theire bullet with fire, & that with greater violence, then any hand sling can doe. For stones to bee cast with the hand see* [i] *Vegetius. Polybius commendeth the vse of them.*

a Xenoph. de exped. Cyri lib. 3. 309 C

b Iud. c 20 v 16

c Liv. decad 3. l. 8. 207

d Veget. l. 1, c. 16

e Veget. lib. 3. c. 14. in fine.

f Veget. l. cap. 16

g Veget. l. 2, c. 23

h Onesand. ca. 19

i Veget. l. 2. c. 23

10 The armour of the Argilos] *What this Argilos should meane, I see learned doubt, and I haue litle to say. Whether it come as a diminitiue from ἀργὸς (swift) or from a City of Thrace, called Argilos, or from any other originall I will not affirme. Heere if the text bee not corrupted, and the worde crept in, or exchaunged by the negligence of some copier, it must signifie a targetier. Which Ælians description maketh evident. That there was such a Citty in Thrace you shall finde in* [k] *Thucydides. And that the Thracian foote for the most part were Targetiers, I remember, I haue read in Xenophon. But then a quæstion may againe arise, seing the inhabitants of that City were not called* argiloi *but* argilioi *(for the City it self was called* Argilos*) why the Targetier should bee called* Argilos, *and not* Argilios. *The chaunge is not great. Many such mistakings are to bee fownde in transcribing of Copies. But I thinke rather there is an errour in the text; and that for two causes. First because Ælian dividing the foote into three kindes,* Armed, Targetiers, *and* light-armed, *and discoursing of the* armed *and* light-armed *expressely by name, not so much as nameth the* Targetier, *but vnder the name of* Argilos. *Then for that* [l] *Lipsius (whether hee had another copy of Ælian, I cannot tell) citing this very place of Ælian, citeth other wordes, then heere wee find.* The Targetiers, saith hee, *(out of*

k Thucy l. 4. 328 C & l. 5. 356, D

l Lipsius ad Polyb l. 3 dialogo. 1 in fine.

Ælian, as hee prætendeth) vſe, as it were, a middle kinde of arming. For theire Target, called *Pelta*, is a litle light Target, and theire pikes come much ſhort of the Pikes of the armed. *Vnleſſe happily Lipſius haue borrowed the wordes out of Suidas imagining them to bee Ælians, and ſo citeth them vnder his name. For I finde them in Suidas in the explication of military appellations: but I finde them in noe edition of Ælian, that hitherto hath beene printed.*

11 A litle ſlight target called Pelta] *The forme of this litle target is diuerſly expreſſed by divers Authors.* [a] *The Scholiaſtes of Thucydides giveth it a Tetragonall or foureſided ſhape: with whom alſo iumpeth* [b] *Suidas,* [c] *Heſychius ſaith,* Pelta *is a litle target having noe circumference, meaning, I thinke, it is not rounde. Hee ſaith alſo it is a Thracian weapon: to both which ſignifications Suidas agreeth. The Thracians vſed theſe kindes of Targets, and often ſent theſe Targetiers to ſerue the Græcians.* [d] *Nymphodorus (ſeeking to make a league betwixt the Athenians and Sitalces King of Thracia) promiſed to procure Sitalces to ſend them an army of horſe, and Peltaſts (Targetiers.) Xenophon ſpeaking of the Thracians, that aſſaulted his lodging, telleth, that* [e] *after the Trumpet ſounded, and many of his ſouldiers came to his aide, the Thracians fled caſting, as theire manner was, theire Targets* (Peltas) *at their backes.* [f] *When Dercyllidas invaded Bithynia, Seuthes the K. of Thrace ſent him horſe and Peltaſts* (targetiers) *to his aide. But the* Pelta, *that Ælian heere mentioneth, was rounde.* [g] *Suidas in the wordes, before alleaged by Lipſius, as out of Ælian called this* target Aſpidiſce: *that is a litle* Aſpis, *ſuch as the Macedonians bore, which were without all quæſtion rounde. The invention of this* Pelta *is attributed to Iphicrates the Athenian.* [h] *For whereas the Athenians before his time vſed large round targets* (aſpides) *which were not ſo eaſy to bee wielded, being heavy,* he provided them litle targets to make them light, and quick for all ſervice. *He altered not the forme of the roundneſſe, but diminiſhed the weight, in abating of the breadth.* [i] *Æmilius Probus ſaith,* hee made them beare litle targets (Peltas) in ſteede of large rounde targets (Parme,) where vppon they were ever after called Peltaſtæ. *The invention therefore of this kinde of Target is attributed to Iphicrates. For the litle targets of other formes were long before the age of Iphicrates.* [k] *Cyrus the yonger had Græcian Targetiers in his army:* [l] *and the Græcians at theire returne out of Perſia: and likewiſe* [m] *thoſe, that ioyned with Thraſybulus to recover Athens out of the handes of the thirty Tyrants. All which were before Iphicrates time.* [n] *Lipſius taketh the* Pelta *to differ litle or nothing from the* Parma velitaris *of the Romans, which doubtleſſe was round.* [o] *Polybius ſaith,* the Roman horſe-mens targets (Parme) were like to Cakes named Popana, *which according to* [p] *Suidas* were broade, rounde, thinne Cakes.

12 And his pike is much ſhorter] *If it bee as Diodorus Siculus and Æmilius Probus report, that Iphicrates was the inventer of the armes of the Targetier, the* pike *ſhould bee litle ſhorter, then the Macedonian pike. Hee gaue them litle targets for great Targets, and doubled the length of theire pike, and ſword. If the length of the pike were doubled, I cannot ſee, how it ſhould come much ſhorte of the Macedonian Pike. But it may bee, they were long at firſt, and that afterward vſe, and commodity brought them to a leſſe ſiſe, to the end the ſouldier ſhould bee nimble and ready at charges. But had the* Peltaſt *noe other armes, then are heere mentioned? Hee had. And* [q] *firſt hee had a linen Curace for lightneſſe ſake, and then a ſword of double length to his former ſword. Further hee had dartes: Xenophon telleth* [r] *that, in the battaile betwixt Artaxerxes & Cyrus, Tiſſaphernes charged the Græcian Targetiers, whoe divided themſelues into two partes, and plied his horſe with* dartes *as hee paſſed through them. The ſame Xenophon afterward telleth of the Targetiers vnder his commaunde,* [s] that hee directed them, to hold

[a] Scholiaſt. Thucyd. lib 2, 118
[b] Suidas in Pelte
[c] Heſychius in Pelte.
[d] Thucyd. lib. 2, 118 C
[e] Xenoph. de exped. Cyri. lib. 7. 410 B
[f] Xenoph. hiſt. Græc li 3. 480 B
[g] Suidas in Indice.
[h] Diod. ſicul. lib. 15. 408 Aemilius Prob. in Iphicrat
[i] Aemilius Probus in Iphictate.
[k] Xenop. de exped. Cyri. lib. 1, 263 C
[l] Xenop. ibid lib 5. 347. A & lib. 3 312 C & li. 4. 341 D E
[m] Xenoph hiſto. græc li. 2 472. E
[n] Lipſius Analeſt. in 3. Comment. in Polyb.
[o] Polyb. lib. 6. 471. C
[p] Suidas in Popana.
[q] Aemil. Prob, in Iphicrat.
[r] Xenoph de exped Cyri. lib. 1. 270 D
[s] Xenoph ibid l. 7. 373 B

hold their fingers in the thongs of theire dartes, and bee ready to throw, when hee gaue a signe: [a] *And that these very Targetiers of Iphicrates with theire* dartes *and other missiue weapons destroyed a whole* Mora *of the Lacedemonians without comming neere or closing with them.* *Yet* [b] *Leo giveth the Targetiers noe more, then* targets, *and speares* (Dorata.) *But in that (as in many other thinges) I make noe doubt, hee followeth Ælian, whose wordes also hee well nighe reteynes, aswell in this place, as many other. In pervsing the story of Alexander (in Arrian, the most faithfull historian of his deedes) I find noe Targetiers by the name of* Peltastæ *in all his army. The names of* Armed, *of* archers, *of* Darters, *of* slingers *I meete often: but not of* Peltastæ. *Which made mee once doubt, whether Alexander ever vsed them or noe. Since vpon better consideration I am induced to thinke, though the name in the story faileth, Yet the kinde of souldiers, so armed, and so appointed, as Ælian describeth, may easily bee found: and that vnder the name of* Hypaspistes. *Which name albeit most vsually signifie him, that carries another mans Target, yet is it also applied to souldiers, that are neither light, nor heavy-armed, of which kinde the Targetiers were, as a meane betwixt both. That Hypaspistes signifieth noe heavy-armed, may bee evident by the wordes of Arrian.* [c] *Alexander*, when hee sawe the streights of Cilicia possessed with a strong gard, left Parmenio behinde withall, that were heavy armed, himselfe about the first, watche taking the Hypaspistæ, and the Archers, and the Agrians (who were darters, as I haue shewed) led on in the night toward the streights, purposing to fall vpon the watche, before hee was looked for. *Hee left all the* heavy-armed *with Parmenio, and tooke the* Hypaspistæ *with him.* *And in another place hee saith:* [d] Alexander commaunded the Hypaspistæ first to passe the river, and after them the Macedonian armed. *Hee distinguisheth the* Hypaspistæ *from the* armed. *And streight after:* [e] Three dayes after Alexander vnderstanding that Cleitus & Glaucias were ill lodged with theire army, & neither held watche, nor had cast a trenche for theire owne security (for they imagined Alexander marched away for feare) and that theire Campe was stretched out to a needlesse length, secretly repassed the river a litle before night, leading with him the Hypaspists, and the archers, and the Agrians, and the Phalanges of Perdiccas and Cœnus. *And in the same booke at the assault of Thebes, when Perdiccas had engaged himselfe and brought Amyntas with his troupes in the same danger, Alexander lothe to leaue them in hazard, advaunced with the rest of his army, and gaue a signe to the archers and Agrians to enter the trenche, the* Agemata (*Livy translateth them legions*) *and* Hypaspists *hee held without. So that in all these places hee distinguisheth them from the heavy armed, and maketh the* Hypaspists *one, the heavy-armed another. I might alleage other passages out of the same author, but these will suffise. That they were not of the light armed may bee proued by the same places of Arrian. Where they are alwaies distinguished from the archers and Darters, There targets make them vnfitt for slingers, and mention of slingers I find in other places. The very name sheweth that they carry targets, and the great* Etymologicon *alloweth them speares beside their targets Whereby they are clearely exempted from the light armed It remaineth then, that they be the peltastæ, which Ælian heere speaketh of, especially since they were armed with target and speare, which armes hee giveth to his targetiers, and to no other, except it be to the armed.*

13 Cataphracts] *The horsemen are divided into two kinds, Cataphracts (compleat armed) and not Cataphracts. Cataphracts are those, that cover themselues and horse with armor.* Not *Cataphracts, that fight with launces, or with flieng weapons. Livy termeth Cataphracts* (Loricatos) *becavse they wore curasses* The other sort are either launciers or Acroboliſts. Acroboliſts *came not to the shocke, but plyed the enimy a farre of with flieng*

a Xenoph. histo. græc. lib. 5. 529

b Leo cap 6 §. 37

c Arr. lib. 1 31. E

d Arr. lib 1 7. A.

e Arr. lib. 1, 9, B

f Liv. decad. 4, lib. 5.

flieng weapons. The Launciers closed, and charged the ennemy with theire launces. The word Cataphrasso *(to cover with armes) giveth name to the horsemen* Cataphracts: *and as the horsemen are called Cataphracts, so is the furniture of horse and man called* Cataphragma. *How they were armed* Ælian *sheweth when he saith they cover themselues and their horses with armour yet was it not always, that the whole horse was armed.* [a] *For Xenophon speaking of the* Persians *in the time of the elder Cyrus, saith,* they armed there horses with frontlets and pectoralls & covers for there thighes. *As much hee saith of* [b] *the six hundred horse that followed Cyrus the younger against Artaxerxes, sauinge they wanted couer for there thighes. The horsmen themselues he giueth great Curasses, and cuisses, and head-pieces. So it appeareth that the horse were not all over armed, but onely theire heads their breasts and there forethighes. Yet Plutarch speaking of the Cataphracts in the time of Lucullus, saith, theire leggs, and thighes were vnarmed. Concerning the Parthians Suidas, I know not out of what Author, hath thus:* The Curasse of the Parthian horsemen is made in this manner: The part before covereth his breast, and thighes, and his hands to the fingers end, and his leggs. The hinder-part, his backe, and necke, and all his head. There are buttons made for the sides, with which both the parts being fastened, it maketh the whole horsemen seem, as if hee were made of iron. The iron neither hindreth the stretching out, nor the gathering vp of his limbs, it is so exactly fitted to the nature, and sise of all parts of the body. Likewise they arme there whole horse with iron, except his hoofes, because theire owne armor would little availe, in case theire horse miscaried. *Curtius describeth the forme in the Persian horsemen, whose furniture, hee saith,* was made of plate fastened together in continued dependances of scales of iron. [c] *Appian speaking how the Parthians seeking to terrify Crassus, and his army, vpon the suddaine cast away the couers of theire armour, and both themselues appeared in shining curasses, and head-pieces the Margian iron of which they were made darting forth a flashing, and dispersed twinkling light, and their horses glistring in brasen, and iron furniture. Yet doth Appian in the same place note, that the bellys of these horse, was not armed.* [d] For the french horsemen, *saith he,* that followed young Crassus, when they perceived, how little they prevailed with theire staues against the sure, and vnpierceable armour of the Parthians, lighting from theire owne, and creeping vnder the Parthian horses, stroke them into the bellys, and they impatient of paine and flinging heere, and there, and treading vnder foote, as well theire riders as theire enemies, died in the place. Plutarch hath the like. *The Cataphracts, beside theire armour of defence, had a launce, or horsemans staffe, to fight with all.* [e] *Plutarch affirmes it:* Lucullus, *saith hee,* after hee sawe Tigranes his Cataphract horsemen (whoe were of most acount) defended, as it were, by a hill, that had the ground aboue plaine, and broade, & the ascent (which was about fower furlongs in length) not very hard, or steepe, commaunded the Thracian, and gaule horsemen, hee had, to giue vpon the flanke, and to put by the launces with theire swords: For the onely strength of the Cataphract is his launce, and it alone hee is able to vse either in defence of himselfe, or annoying the enimie: being by reason of the weight and harshnes of his furniture like a man shutte, and locked vp in a wall. *Hetherto Plutarch. Likewise the Parthian Cataphracts, albeit they vsed bowe, and arrows yet they had also launces, with which they came to the shocke with the enemie.* [f] When the armie of Anthony (saith the same Plutarch) sawe the Parthians ready to giue on, the armed turning their faces about toward the enimie, tooke in the light armed, and shutt them vp with in theire battels: themselues kneeling vpon one knee, held

[a] Xenoph Cyro. lib. 6. 64. A

[b] Xenoph de exped Cyro. lib. 1. 143 D.

[c] Appi in Parth. 143 D

[d] Appian in Parthicis 143 D. & Plut. in Crasso.

[e] Plut. in Lucul.

[f] Plut. in Anton.

held out theire targets before, the ſecond rankes with theire targets covered the heads, and vpper parts of the foremoſt, & the following rankes did the like one for another, the figure was like the tyling of a houſe, & repreſented a ſhew worth the ſeeing, and was the ſureſt defence that might bee, to make the arrowes glaunce of, without harme doing. The Parthians imagining this kneeling proceeded from wearineſſe, and faintneſſe, layed aſide their bowes, and taking in hand theire launces, ranne vppon the Romans, whoe giuing a iointe ſhowte ſprung vp preſently, and ſtriking them with their darts, ſlewe the firſt, and put the reſt to flight. *By theſe two teſtimonies the launce of the Cataphract is clearly proved. In what manner the Cataphracts came to fight, Nazarius (cited by Stewechius) ſheweth plainely in a Panegyrick of his.* The Cataphracts, *ſaith hee,* in whome was the principall ſtrength of the field, vſe this diſcipline in charging. After cloſing theire files, they keepe an equalitie in moving forward to charge, & being free from wounds, they break without difficulty any ſtrength of battel oppoſed againſt them. *They are ſaide to bee free from wounds, becauſe both themſelues & horſes (eſpecially before) are covered with ſure armes. Theire moving muſt be ſlow, becauſe of the weight of theire armes, which ſlowneſſe was recompenced with the violence of theire charge, which neither horſe, nor foote was able to reſiſt. And* [a] *yet they had another incõvenience, in that, being overthrowne, or ſlipping, or falling to the ground, neither horſe, nor man, were able eaſily to raiſe themſelues againe. Such was the weight of theire armour.*

Stewechius in comment. ad. 22. caput lib. 8. veget.

a Appian in Parthicis 140. A.

14. Launciers are ſuch] *Launciers, ſaith Ælian, ioine with the enemy, & fight hand to hand with the launce. And did not the Cataphracts ſo? They did, but theire armour differed much. The Cataphracts both horſe, and man, were all over armed. The horſe of the Launciers was not armed, and himſelfe, albeit hee were armed, yet not ſo armed, but that many parts of his body were bare of armes. And his armour came much ſhort of the compleate. Arrian ſaith that the Macedonians being launciers were not able to encounter with the Scythians, whoe were Cataphracts, both becauſe of theire number, and alſo of theire manner of arming. And as the Launciers armour was not ſo heauie, as the Compleate, ſo was it more heauie, then the armour of the foote. Xenophon ſeemeth to ſignifie ſo much, telling of himſelfe,* that taking the targetiers of the front, and ſome out of the midſt of the hollow ſquare battaile, and three hundred choſen men, that Cheriſophus had with him in the front, hee marched away with all ſpeed to ſeiſe vpon the toppe of a certaine hill. [b] And exhorting his ſouldiers to haſte, you may well, quoth Sotridas, the Sicionian, talke of haſte, that are on horſeback. I, in the meane time with this heauie target, am ſcarce able to marche. Xenophon hearing this, ſtreight diſmounted, and diſranking Sotridas, tooke away his target, and with it on his ſhoulder continued his haſt in marching. By chance hee had on at that time a horſemans armour, where with although he were overpreſſed, yet ſlacked hee nothing of his pace. The reſt of the ſouldiers beating and reviling Sotridas compelled him both to his target, and place againe. At laſt they gained the hill, they purpoſed, and made the enemie abandon the nether ground. *Xenophon was heere overpreſſed with the horſemans armour. If it had beene but equall in weight with a foote mans, hee might, as well haue endured it, as the reſt. Plutarch ſheweth likewiſe the weight of the horſemans armour.* Philopœmen, *ſaith hee,* willing yet to giue more ſtrength to the Kings party (hee meaneth Antigonus, the gardian of Phillip afterward King of Macedonia) & to come to hands with the enemy that was already in route, lighted from his horſe, and in a horſmans Curace, and heauie armour,

b Xenophide exõped. Cyr. l. 3. 312.

Plutarch in Philopœm.

armour, wreſtling hardly, and laboriouſlye on foote with the ground, that was rough, & full of brooks, & ditches, hee was ſtrooken through the thighes with a darte: the ſtroke beinge not daungerors, but forceble, ſo that the head paſſed through both his thighes. *Hence both the heavineſſe of the Launciers furniture may bee ſeen, and that Philopœmens thighes were vnarmed, through both which at once hee was wounded with a darte: And ſo the* Launcier *not ſo ſurely armed, as the* Ca-

a Polyb. lib. 6. 471. E

taphract. *The armes, that the Launcier bore are deſcribed by* [a] *Polybius ſpeaking of the armes of the Roman horſemen; who writeth thus:* The armour of theire horſemen is at this day like the Græcian. Of old they had noe curaces, but fought in ſhort gownes girded to them. By reaſon whereof they were ready, & actiue to alight from, and gett vp quickly, on theire horſes. But their fight was daungerous with the enemy, becauſe they wanted armes. Theire ſtaues had two incommodities. For, being made ſlender and quivering, they neither could touche the mark, they aymed at, and moſt of them, ſhaken with the motion of the horſe, fell out to bee broken, before the head touched, or faſtened vpon any thing. Ioyne, that, having no iron point at the butt end, they ſerved but for one ſtroke onely, and that at the firſt. And yet the head being broken of, the remnant of the ſtaffe was of noe vſe. The targets they had, were made of oxe-hyde in forme like to cakes named *Popanæ*, which are vſed in ſacrifices. And they were neither fitte to encounter the enemy, by reaſon they had noe ſtiffneſſe or faſtneſſe in reſiſtance, and being reſolved, and ſoked, or putrified with raine, they could not bee any thing worthe. Finding theſe inconveniences by experience, they quickly chaunged for the Græcian armour; In which the firſt ſtroke of the head of the ſtaffe is certeyne, and worketh the deſigned effect, by reaſon of the forme, which is not quivering, but ſtiffe and ſturdy: & likewiſe turning foreward the butte end, which is armed with a ſharpe point, they might therewith faſten a ſound, and forcible blowe vpon the enemy. The like may be ſaid of the Targets, which both in charging, and defending, haue a ſure & vnfailable vſe. Which they noe ſooner ſaw, then imitated. For the Romans, if any other nation, are good to change their faſhions, and to chooſe that, which is beſt, whereſoever they finde it. *The Launcier then had a Curace, a head-piece, a launce, and a ſword for his armes, and this was generall in Launciers; but ſome had beſides a target, and were therefore called targetiers. The* Launciers *were called in greeke* Doratophoroi, *or* Xeſtophoroi: *two ſeuerall appellations in ſhewe, but ſignifieng in deed but one thing, the one heing derived from the matter, the other from the forme of the launce.* [b] Doru, *as I ſaid before, ſignifieth wood: and becauſe all the Launciers armes excepting the launce, were of other matter, then wood, the launce was called* Doru, (*of the wood*) *and the Launciers* Doratophoroi. *As for* Xyſton, *or* Xeſton (*for they ſignify one thing*) *it commeth of the verbe* Xuo, *or* Xeo *to ſhaue, or poliſh* (*as our ioyners doe*) *and the launces, being made of wood ſhaven, or poliſhed, are named* Xyſta, *or* Xeſta, *of the forme* (*as I ſaid*) *that is given them by ſhaving, and the Launciers, that beare theſe launces,* Xeſtophoroi, *or* Xyſtophoroi. *And heere I am once to note for all, that wee are not to preſſe wordes according to the proper ſignification of theire primitiues, from whence they are derived. For conſidering there are more things, then names of things* (*as Logicians ſay*) *the moſt copious language, that is, cannot giue proper names to all. Heereof come the wordes of diuers ſignifications. And howſoever names ſeeme at firſt rough & ſtraunge, vſe, and cuſtome maketh them ſmooth, and gives them paſſage. As the coyne of a Prince is currant by the ſtamp, hee ſetteth vpon the mettalle, what mettalle ſo euer it bee, fine, or baſe.*

b Art. confounderh Xyſton and Doru, lib 1. 15. F.

16 Acroboliſts] *The word importeth ſuch, as throwe aloft, or from aloſte.* Ballo *ſignifieth to throwe:* Acron, *the higheſt, or the vttermoſt. By common vſage* Acrobolizo *is taken for to dart, and by conſequent* to skirmiſh *a farre of. Becauſe ſuch as caſt flieng weapons, as* darts, *and* ſtones, *and the like, came not to ſtedfaſt fight, but lay aloofe, and onely threwe their weapons at the enemy, and of ſo doing are called* Acroboliſts. Acroboliſmos *in Polybius is interpreted* Skirmiſhing. *And* [a] *Diodorus Siculus ioyneth* Acroboliſmos, *and a ſhort meddley in fight together,* [b] *which Xenophon termeth* Acroboliſis *by another word flowing from the ſame fountaine.*

a Diodor. Sicul. lib 15 468.
b Xenop. de exp. Cyri l. b. 3 309 C

17 Tarentines] *They are ſo called of a Citty in Italy* Tarentum *by name, the inhabitants whereof, that were horſemen, vſed this manner of fight. But he maketh two kinds of* Tarentines; *one, that ever fought a farre of with darts, and never came to hand with the enemy, the other, that after a dart or two caſt, came cloſe vp, and fought hand to hand.* [c] *Livy ſpeaketh of a third kind of* Tarentines, *who vſed in fight two horſes at once made faſt together, and one being weary, leaped vpon the backe of the other.*

c Liv. decad. 4, lib. 5 92. C.

18 Some vſe darts a farre of] *Of the manner of fight of theſe horſemen, the paſſage of Xenophon is worth repeating.* [d] After theſe things done, *ſaith hee,* the aide of Dionyſius (which hee ſent the Lacedemonians) arrived, being more, then twenty Gallyes. They brought French, and Spaniards, and aboue fifty horſe. The next day the Thebans, and theire confederats, embattailing theire armie, and filling therewith the whole plaine even to the ſea-ſide, & to the hills, that lay about the City (of Corinth) deſtroyed whatſoever, might ſerue to any vſe. The horſemen of the Athenians, and Corinthians, ſeeing the ſtrength, and multitude of the enemy, came not neere vnto them: but the horſmen of Dionyſius, albeit fewe in number, galloping heere, and there, diſperſedly, and putting ſpurrs to theire horſe, charged them with their darts, and in caſe the enemy followed, they returned with all ſpeed, and then turned againe, and threw darts afreſh. In doeing theſe things they vſed to alight from theire horſe, and reſt themſelues, and if any of the enemy ſingled out to fall vpon them, leaping quickly againe to horſe-backe, they fled: and being purſued any diſtance from the army, as ſoone as thoſe that purſued them retired, the Tarentines followed, and plyed them with their darts, and put them to great diſtreſſe: forcing the whole armie to advance, and retire, as they liſt themſelues. So farre Xenophon. *Another example I will adde out of Livy of the* Numidians, *whoſe manner of fight is all one with the* Tarentine *manner.* [e] In Liguria *ſaith hee,* nothing worthy of memorie was done a long time. At the end of the yeare all things were brought to extreame haſard. For both the Conſuls camp, being aſſaulted, was hardly defended, and not long after, when the armie was ledd through a forreſt, the way whereof was ſtreight, and narrowe, the Ligurians poſſeſſed themſelues of the mouth of the ſtraights. Through which when the Conſull could find no paſſage, hee turned about his armie, and purpoſed to reduct it, the way he came. But the mouth of thoſe ſtraights was likewiſe poſſeſſed by a part of the enemies forces. And now the remembrance of the *Deſaſter* of Caudium preſented it ſelf not onely to the minds, but even almoſt to the eyes of euery man. There were wellnigh eight hundred Numidian horſe at that time in the camp. The Commaunder of them promiſed the Conſull to breake through on which ſide, hee pleaſed; onely he deſired to know on which ſide moſt hamblets, and villages were. Vpon them, ſaid hee, I will fall, and ſett the houſes on fire preſently, that, that feare may compell

d Xenoph. Hiſt. græc. li. 7 617.

e Liv. decad. 4. lib. 5. 85. B.

compell the Ligurians to forſake the ſtreights, they hould, and runne ſeverall wayes to defend theire owne. The Conſull much commended the man, and laded him with hopes of promiſes. The Numidians vp to horſe, and began to ride heere and there, before the enemies gards, provoking yet no man. Nothing at the firſt ſight was more contemptible. The horſe, and men, were little, and leane. The horſman vngirded, and vnarmed, ſaving that hee carried darts; the horſe without a bridle galloping deformedly with a ſtiffe neck, and a head thruſt out at length. They purpoſely augmenting this contempt ſlid from their horſes, and dallied, and ſported, to bring the enemie to a gaze. Wherefore the enemy, which at firſt were intentiue, and ready for a charge, became gazers on, and the moſt part vnarmed themſelues, & ſett downe vpon the ground. The Numidians rode vp neerer, and then backe againe, and by little, and little, gott to the skirts of the foreſt; as if theire horſes, being reſty, had caried them forward againſt theire wills. At laſt, putting ſpurres to, they broke through the midſt of theire enemies gards, & entring into a larger field, they ſett fire on all the houſes next the way; then burned they the next village, and waſted, and filled, all things with fire, and ſword. The ſmoke firſt ſeene, then the cry of the people affrighted, laſtly ould men, and children, flieing for ſuccor, raiſed a tumult in the campe. Therefore without counſell or commaund every man of himſelf ranne to the defence of his owne, and in a moment both the enemies camp was forſaken, & the Conſull, delivered from his ſiege, came to the place intended. *By theſe two examples the kinde of fight, that theſe darters one horſe-backe maintained, may be perceiued, which was* [a] *not to come neer the enemy, but to keep a looſe, and lett theire darts fly. Beſides not to obſerue any order in files, or rankes, but ſtraglingly to gallop the field, ſeeking by theire diſbanding to tolle the enemy out of his ſtrength, and ſo to worke theire advantage. And albeit in the ſecond example, the Numidians vſed not theire darts, yet they would haue done it, if need had beene; and you ſhall find in other places of* [b] *Livy, and Polybius, they did vſually, as alſo in* [c] *Cæſar.*

a Polyb. lib. 3. 225. B.

b Liv. decad. 3. li. 2 42. C. & Polyb. lib. 3. 224 B.

c Cæſar de bell. ſp African. 415

19 After they haue ſpent one or two] *Theſe darters on horſebacke differ from the other before mentioned, becauſe at the laſt they ioyne, and fight hand to hand with the enemy; which the other did not. And what fight they with all? not with launce; for then ſhould they be Launciers, of whom wee haue ſpoken. But they fight with battel-axes, ſwordes, and ſuch other ſhort weapons. Suidas affirmeth it, alleged by* [d] *Arcerius:* Theſe, *ſaith hee*, at firſt caſt light darts a farre of, and afterward approaching, joyne with the enemy, fighting with battell-axes, or ſwords; which kind they call light-horſemen.

d Arcer. in notis ad Aelian. pag. 817.

20 The horſemen, that vſe bowes] *I need not alledge any thing to ſhewe that the Scythians were good archers. It is knowne to any man, that is not ignorant of Hiſtory. I will onely note, that in flieng from the enemy, they harmed as much, as in falling on. For as they fled they turned half theire bodies backeward, and ſhotte at him, that followed, and expected noe ſuch thing. Of which faſhion of fight Plutarch giueth this iudgement.* [e] The Parthians, *ſaith hee*, in theire flight ſhoote backward, & doe it beſt of all other, except the Scythians; the invention being witty, both to ſaue themſelues by that defence, and alſo to take away the ſhame of flight. *That which Plutarch attributeth to the Scythians and Parthians,* [f] *Xenophon ſaith, the Perſians vſed alſo, both for manner of fight, and flight.*

e Plutar. in Craſ. & Appian in parth c. 114 C.

f Xenoph de exped Cyri, lib. 3. 306. D.

The

The framing of a Phalange, and definition of the art Tactick.

Chap. III.

BVt seeing every *Phalange* conteineth an vniting of *bodies*, *offices* of commaund, *orders* in place, a Convenient number of men, and wordes of *Direction* aſwell for daily exerciſe, or trayning, as for true *fights*, It ſeemeth neceſſary to deduce euery of theſe things into perticularity. The firſt [1] labour therefore in the art *Tactick* is for a *Generall* out of a multitude, that cometh to hand confuſed, to chooſe the fitteſt men, and diſpoſe them into convenient places (that is to order them into *files*, and *bodies*) and of the whole number to proportion a [2] reaſonable levie, & fitting the ſervice in hand. [3] For to diſpoſe and enable an Army, skillfully to march, to encampe, & to embattaile, is a matter of no ſmall conſequence. In aſmuch as we often find mightie Armies through their diſorder to haue been defeated by [4] a handfull of men wel diſciplined & exerciſed. Wherefore *Æneas* defineth this art to bee *a ſcience of warlike motion: Polybius, To be a skill whereby a man taking a multitude ſerviceable ordereth it into files, and bodies, and inſtructeth it ſufficiently in all things pertayning to warre.*

Notes.

1 THE firſt labour] *After prouiſion of armour followeth choice of men. What men, and out of what Climats, and of what profeſſion, and of what age, and of what conſtitution of body, and of what education, are to be choſen, becauſe Ælian referreth to the diſcretion of the Generall, not ſetting downe any particular, I will likewiſe paſſe over, noting onely ſome places, where hee, that is diſpoſed to ſeeke, may finde the circumſtances of choice of ſouldiers. Xenoph. Cyrop. lib. 1. 32. A. B. Polyb. lib. 6. 406. C. Et Lipſ. ad Polyb. lib. 1. Dialogo. 2. 3. 4. 5. Veget. lib. 1. cap. 2. 3. 4. 5. 6. 7. Et Stewechius ad hæc omnia cap. 31.*

2 A reaſonable leuy and fitting the ſervice] *Levyes are to be made according to the warre, which is vndertaken. The enemie is not alwaies of one ſtrength. Sometimes the forces, againſt which wee are to lead our armie, are more, ſometimes leſſe. The Romans, if the number of enemies were not very great, vſed but* [a] *a Conſular Armie; which conſiſted of two legions of Romans, and of as many foote of theire Allies; when greateſt, onely ioyned two Conſular armies together. And for Allies theire foote, as I ſaid, was equall with the Roman foote, theire horſe were treble as many, and the Romans having three hundred horſe to a Legion, the Allies had nine hundred. Yet in caſe of great neceſſitie, wee reade, that the number of the Legions was increaſed in a* Conſular *armie. Polybius reporteth that, a little before the battaile of Cannæ, the Conſuls Lucius Æmilius, and C. Terentius, had allowed in theire armie, which they led againſt Annibal, eight Legions, which never was done before.* [b] *Alexander the great being to invade the Kingdome of Perſia, which for wealth, multitude of men, and largeneſſe of Territorie, was eſteemed the richeſt, mightieſt, and greateſt Empire at that time in the world, had not in his armie aboue one and thirty thouſand foote, and fiue thouſand, and odde, horſe.* [c] *Armies compoſed of multitudes are neither fitt to bee guided, and commanded, nor yet to bee provided for.*

See Leo cap. 4 § 17 & cap. 12 § 34.

[a] polyb li. 1. 12 B. Polyb. lib. 3. 257. C.

Polyb lib. 6. 467 C.

[b] Diod. Sicul. lib. 17. 571.

[c] Veget. li. 3. c. 1

And hee that trusteth to multitudes, esteemeth not greatly the valour of his souldiers. [a] *Xerxes saide, he was not foiled by the Græcians through default of number, but because hee wanted men. As it is folly to leuy more men, then is needfull, so is it* rashnesse, or [b] rather madnesse to put a few souldiers to hasard against forces, that exceed in number, and valour. *Briefly all levies are to bee tempered with consideration of persons, times, places, and other circumstances.*

a Frontin. lib. 4. cap. 2.

b Xenop. in Agesilao.

3 For to dispose and enable an Armie] *Heere are sett downe in a word, as it were, the principall heads of the art of warre, Marching, Incamping, and embattailing; to which heads all other may very well bee referred. And of these three Alian handleth in this treatise but two, namely embattailing, and marching: of embattailing, so much, as perteineth to forming of a common Macedonian Phalange; of Marching, no more, then belongeth to embattailing in a march, that is to ordering of your men in that figure, which shall yeald most advantage against the enemy, that meeteth you; excepting that hee shortly toucheth the marshalling of baggage in your marche. The other considerations of marching, as* laying, or avoyding ambushes, sending out to discouer, *when* to march by night, *when* by day, *how* to deceiue and avoyde the enemy lyeng neere, remedies against horse, against shotte, against multitudes, passages of mountaines, of woods, of rivers, of plaines, of drye, and sandy places, *these, I say, and such like, hee toucheth not in a word. And for the skill of encamping, which comprehendeth the seating of your camp, and provision of all things belonging thereto, as also the siege, and defence of Citties, and fortresses, hee likewise passeth it over with silence, as a thing not incident to his purposed discourse.*

4 A handfull of men well disciplined and exercised] *What exercise doth for the making of good souldiers, experience of former times will teache. It hath been the manner of all famous generalls to bring theire souldiers to perfection by exercise.* [c] *Vegetius saith very well,* It is not length of life, or number of yeares, that teacheth the art of warre, but continuall discipline & meditation of armes. Let a souldier serue never so many years, so long, as hee is vnexercised, hee shall bee still a raw souldier. *The knowledge and science of armes maketh a souldier, which is not gayned but by action. As long as a souldier handleth not his weapons, hee is noe Actor, but a looker on. For as all abilities in artes (which are called* Habits) *arise out of a number of actions precæding, so can noe man atteyne to a perfect knowledge of armes, till hee haue with care, and diligence, employed his study and labour therein, and vpon the foundation of practise raised the frame of sound and perfect skill. Noe man is naturally borne a souldier. One may more incline to warre then another, but the skill commeth not without industry and paines.* [d] *Plutarch saith,* that it is neither *Eurotas* nor the place betwixt *Babyx* and *Gnacion*, that bringeth foorth valiant and warlicke men, but they are to bee fownd in all places, where youth is bred vp in shame of vice, and boldnesse to vndergoe perill for vertues sake. *Eurotas was a river neere Lacedæmon;* [e] *Babyx and Gnacion two rivers with in the same City. The Lacedæmonians were accounted the most valiant people of Greece. And Plutarch speaketh this of the victory, which the Thebans had against the Lacedæmonians; The Thebans, which till that day had noe reputation of valour; but afterward by exercise, & vse of armes, vnder Epaminondas, and Pelopidas, became the bravest souldiers of Greece: Not vnlike was the saieng of Pyrrhus to his muster-master:* choose you, *said hee,* good bodies, and I will make them good souldiers. *The strength of the body is requisite in a souldier to vndergoe the labours of warre;* [f] *but exercise it is that giveth the perfect skill, and the desire to handle weapons. Therefore* [g] *as Demosthenes, being demaunded what was the first and principall thing in the arte Oratory, answered* Action, *what*

c Veget. lib. 2. ca. 23.

d Plut. in Pelop.

e Plut. in Lycur.

f Veget. li. 1. ca. 1

g Cicer. in Bruto 222.

what the ſecond, Action, *what the third,* Action: *So may wee truely ſay, that in the art military exerciſe is not onely the firſt, ſecond, & third, principall thing to make a ſouldier, but alſo all in all. Ælian ſpeaketh not of exerciſe but in Generall: what particuler exerciſe is fitt for a ſouldier, hee, that deſireth to knowe, let him reade. Xenoph. Cyrop. lib. 2. 42. B. C. & lib. 3. 77. C. D. Veget. lib. 1. ad caput. 9. ad caput. 19. & lib. 2. caput. 23. 24. Iuſt. Lipſ. comment. ad Polyb. lib. 5. dialog. 14. Leo. caput. 7. Patric. Parallel. parte 2. 139. Now for the victories, that haue beene obteyned by a ſmall number of men well exerciſed, againſt a multitude vnskillfull, and vntrained, I need, ſay nothing. Hiſtories are plentifull witneſſes therein. I will onely recite one example wherein the difference may bee ſeene not between skillfull, and vnskillfull, but between skillfull, and skillfull both enured to labour, and both brought vp vnder the ſame practiſe, and diſcipline of Armes. At what time, after the death of Alexander the great, his chiefeſt Commaunders fell at oddes emongeſt themſelues; and ſought every man to eſtabliſh himſelf in the poſſeſſion of his Conqueſts, it chaunced, that Antigonus, and Eumenes came together in two ſundry battailes. In the firſt Antigonus had in his army aboue 28000. foote, 8500. horſe, & 65. Elephants; Eumenes leſſe foote, 17000. in all (but emongeſt them 3000. Argyraſpides, whoe had ſerved in all Alexanders battailes, & were invincible, & ſtrok a great feare into the enemies harts) & about the number of horſe, his enemy had, & 80. Elephants:* [a] *When the foote came to ioyne, ſaith Diodorus Siculus, the fight continewed a good while, & at laſt, many falling on either ſide,* Eumenes his foote had the better by reaſon of the valour of the Macedonian Argyraſpides. They, albeit they were ſtroken in years, yet in regard of the manifold perills, they had been in, excelled in courage, & skill of fight; in ſo much that no man was able to withſtand them. And therefore being but 3000. in number, they were notwithſtanding ſett againſt the enemy, as the ſtrength of the whole army. *In the other battaile he ſpeaketh of their age.* [b] At that time, *ſaith he,* the yongeſt of the Argyraſpides were noe leſſe, then 60. years olde, or thereabout; the moſt of the reſt about 70. & ſome were elder, al of thē vnmatcheable in skill & readineſſe of fight, & ſtrength of body; ſuch was theire dexterity, and courage gathered in continuance of dangers, which they had paſſed. *Afterward rehearſing the battaile, he ſaith:* The Argyraſpides ſerring themſelues cloſe, and with liuely force falling vpon the enemy, killed ſome, and put other ſome to flight. And fought againſt the whole Phalange of the enemy with irreſiſtible fury, not looſing one of theire owne men, & yet through skill & manhood ſlayeng of the enemy aboue 5000. & routed theire whole foote, which in number were many times more, then themſelues. *Thus writeth Diodorus Siculus of the olde practiſed Macedonians: who yet fought not againſt ſtraungers, or rawe ſouldiers, or ſuch, as were newly brought into the field, but againſt men of their owne nation, that had long handled armes, & wonne many victories, & been inſtituted, and trained in the ſame diſcipline and courſe military, that they themſelues had been before: Such difference long practiſe, and experience wrought in the one againſt the other.*

[a] Diodor. Sicul. lib. 19. 6. 7.

[b] Diodor. Sicul. lib. 19. 693.

What a file, or Decury is, and of how many men it conſiſteth.

Chap. IIII.

TO order into *files* is [r] to make *files*. A *file* is a number of men beginning at one Leader, and contineuing in order of *followers* to the laſt man.

The number of a *file* is diuerſly given, [2] for ſome allow it eight, ſome twelue, and ſome ſixteen men. Wee for this time will retaine the number of *ſixteen*, both becauſe that number is proportionable to the indifferent length of a *Phalange*, and alſo, if vſe require at any time to double the depth thereof, and to giue it thirty two men, or to leſſen, and contract it, and make it but eight; neither of both ſhall hinder the ſervice of the *light-armed* behinde, [3] for whether they vſe *Darts*, or *ſlings*, or *Arrowes*, they may eaſelie with their flieng weapons overreache the depth of the *Phalange*.

Notes.

NExt after arming, and choyce of ſouldiers, it followeth to put them in order for ſervice, that is firſt to file them, then to band them (which is ioyning of files) and laſtly to embattaile them, which is to make a Phalange. Of theſe in the following chapters.

1 To make files] *The Tacticks haue not expreſsed the precepts of this arte all in the ſame wordes. A file is heere called* Lochos, *the ſignification whereof is diuers. Sometimes it is taken for an* [a] Ambuſhe, *and* Lochan *ſignifieth to lye in* Ambuſh: *it ſignifieth beſide a number of men, that are of one body, as it were, and vnder one commaunder, who is called* Lochagos, *and* Lochizo *is to ſett in files. The number of this body hath beene diuerſly taken. The Thebans* Lochos Hieros *firſt inſtituted by* [b] *Gorgidas, or as other ſay by* [c] *Epaminondas, conſiſted of three hundred men. The* Lochos *of the* [d] *Lacedæmonians of fiue hundred and twelue. Xenophon in his returne out of Perſia telleth, that the number of the* [e] Lochoi *of the Græcians, which hee ledde, was almoſt a hundred armed men. And when they choſe extraordinarie men to preſerue the* Plæſium *(a hollow forme of ſquare battaile where in the Græcians marched) from breaking, they appointed* [f] *ſix* Lochoi, *of a hundred a piece, for that purpoſe, and Commaunders to leade them. And after hee reckoneth ſeventy men to a* Lochos. *And in the firſt booke of Cyrus his expedition, hee telleth* [g] *of two* Lochoi *of the* armed *of the Regiment of Menon, that were ſlaine by the inhabitants of* Cilicia, *and counted them a hundred men. Cyrus in the ſame Xenophon commaundeth his* Lochos to bee made of twenty foure men. *But the* Lochos, *that Ælian heere ſpeaketh of is a leſſe number, namely ſixteene, which was the file of the Macedonians, as appeareth by* [h] *Arrian, and* [i] *Polybius. Albeit Arrian calleth it not* Lochos, *but* Decas; *and Polybius the depth of the battaile. This number of ſixteene was vſed by the Græcians alſo before King Phillips time, as appeareth by* [k] *Xenophon in his hiſtorie of the Græcians. And likewiſe by* [l] *Thucydides, who reporteth, that the Siracuſans were ſo ordered againſt the Athenians. Leo ſaith it was the manner of the auncient warriers to make a file of ſixteen, & calleth it a* Tetragonall *number.*

a Polyæn. lib. 3. in Iphicrat. § 24 & lib. 4. in Alex. § 21.

b Polyæn. lib. 2. in Gorgida.

c Athen. dipnoſ. lib. 13. 602.

d Plut. in Pelop.

e Xenoph. de exped. Cyri lib. 4. 241. D

f Xenoph. de exped. Cyri lib. 3. 310. B

g Xenoph. de exped. Cyri li. 1. 248 E. 249.

h Arrian lib. 7. 764 D.

i Polyb. lib. 17. 764 D

k Xenoph. hiſt græc. li. 4. 515. E.

l Thucyd. lib. 6. 458. B

2 Some allow it eight, ſome twelue] *The Lacedæmonians made the depth of theire battaile ſometimes eight men (for a file is it, that meaſureth the depth of the battaile) and ſo fought with theire enemies.* [m] *Thucydides witneſseth as much:* the Lacedæmonians, *ſaith hee*, were not alwaies ordered in depth alike, but as theire Lochagoi (they were commaunders of fiue hundred and twelue a piece) thought good, commonly notwithſtanding the depth was of eight a piece. [n] *Xenophon alſo writeth, that Dercyllidas the Lacedæmonian, being to fight with Tiſſaphernes, and Pharnabazus, ordered his Phalange into eight. The ſame proportion was helde by* [o] *Mnaſippus the Lacedæmonian againſt the Corcyræans, and*

m Thucyd. lib. 5 pag. 392. A

n Xenoph hiſto græc. 489. D

o Xenoph. hiſto. græc. li. 6. 586. C

and by [a] Clearchus the Lacedemonian against his enemies. Xenophon saith, that Thrasybulus the Athenian, salieng out of Pyræum against Pausanias the Lacedæmonian King, ranged his men into eight. His wordes are: [b] When Thrasybulus and the other armed sawe these things, they quickly gaue aide to their owne people, and put their armed in order eight deepe. Pausanias being hardly layed vnto, and retiring foure or fiue furlongs, commaunded the Lacedemonians, and their Allies, to resort vnto him, and there casting his men into a deepe Phalange, ledde against the Athenians. *Out of which words wee may note, that the Lacedæmonians obserued not alwaies that order of eight deepe, but varied according to place, or other circumstance. Yet ordinarily they gaue but eight to a file, or to the depth of their Phalange, as Thucydides witnesseth before.* [c] *The same Thrasybulus with his complices entring the base Citty of Athens called Pyræum* to free his countrie from bondage of the thirty tyrants, having but a fewe with him, possessed the court, which led to the temple of Diana, called Munychia, and being assaulted by the garrison of the Lacedæmonians, ordered his armed men into ten deepe, and the light armed behinde them. The tyrants, and their followers stood in battaile fifty deepe. [d] *At the battaile of Leuctra the Lacedæmonian armed were twelue in depth, the Thebans fifty.* [e] *Alexander the great leading his armie against Clitus, and Glaucias, the way being so narrow, that no more then foure might marche in front, made the depth of his armie a hundred and twenty.* [f] *And the souldiers that Xenophon brought backe out of Persia, when they purposed to sacke Byzantium, put themselues without commaunde in order of fifty deepe. In the text is fifty deepe, but the margent hath eight: which I take to bee the truer reading, because Xenophon saith, the place was faire to sett a battaile, being voide of building, and having an euen plaine. And it was not the manner of the Græcians to make a Phalange fifty deepe, vnlesse there were extraordinarie occasion.* [g] *In the battaile of Delos betwixt the Athenians, and Thebans, the Thebans were fiue and twenty in depth, the Athenians but eight. The same* [h] *Athenian were eight in depth against the Syracusans. So that the depth of eight was much vsed among the Græcians. How-be-it I find not, that they called a file of eight by the name of* Lochos. [i] *Cyrus the elder made his files of twelue men, and the leader thereof hee called* δωδεκαδαρχος, *and* δεκαδαρχος, *and the file it selfe* decas, *which in signification albeit it importeth ten, yet wee must retaine the word, as it is vsed, and not fly to the originall of the Etimologie, as I noted before vpon other occasion. But Ælian maketh his file of sixten. His reason followeth.*

3 For whether they vse darts &c.] *The file being sixten in number, the souldiers therein every one having* after-distance *from other three foote, take vp in the whole depth fourty eight foote, and being doubled to thirty two men, they take vp ninety six foote, which amounteth to thirty two yards. That bowes and slings easilie out reache this distance, appeareth by Vegetius, before by mee alleaged,* [k] *who saith, they* stroke their marke six hundred foote of, which in our *account by scores, is ten score. Of the darte a man may rather doubt, which notwithstanding with an exercised arme is sent much further, then thirty two yards.* [l] *Lipsius writeth, that a dart was vsually cast foure hundred foote, which amounteth to a hundred thirty three yardes, or as wee in shooting measure it, six score and odde. The reason why Ælian placed the light armed behind wee shall see beere after in fitt place.*

a Polyæn. lib 2. in Clearcho. §. 9.
b Xenoph. hist. græc. l. 2. 477. C. D
c Xenoph. hist. græc. lib. 2. 472. C. D.
d Xenoph. hist. græc. li 6 596. C
e Arr. lib. 1. 6. D
f Xenoph de exped. Cyri lib. 7. 359. D
g Thucyd. lib. 4. 315. C
h Thucyd. lib. 6 458. A
i Xenoph Cyrop lib. 3. 78. A. & lib 2. 43. A. C
k Veget. lib. 2. cap. 23
l Lipsi. ad Polyb. lib. 5. 242.

The order and parts of a file or Decury.

Chap. V.

[1] THE best man of every *file* is the first in place, and hee, that leadeth the *file*, who is also called the *file-leader*, the *Commaunder*, & the *fore-stander*. The last man of the *file* is called the *Reare-Commaunder*, or *bringer-vp*. The whole *file* it self is termed [2] a *verse*, and [3] a *Decany*, and of some [4] an *Enomoty*. Yet there are, that hold *Enomotia* for the fowerth parte of a *file*, and the Commaunder of an *Enomoty* they call *Enomotarcha*, and two *Enomoties* they take for a *Dimery*, & name the Commaunder thereof *Dimerites*, so that the half *file* is said to bee a *Dimery*, [5] and the Commaunder *Dimerites*. This man is the last of the *file*. Hee, that standeth next behinde the *file-leader*, is named a *follower*, and the next after him a *Leader*, and the next after him againe a *follower*. So that the whole *file* consisteth of *Leaders*, & *followers* placed successiuely one after another. [6] It behoueth the *file-leader* to bee more sufficient, then the rest of the *file*, and next him the *Leader* of the *half-file*, or *bringer-vp*. They define a *file* to bee a *Rowe* of followers placed according to theire worth successiuely after a *file-leader*.

Notes.

1 THE best man of every file.] *Why the file-leader ought to bee the best man of the* file *many reasons may bee given first because hee commaundeth the rest. And as in all other things hee that is to rule, and governe another, ought to haue more knowledge, then hee that is commaunded, and governed, so is it in matter of warre. Further, as his skill, so his valour, ought to bee most: that his example may incourage and incite the rest. Which is the cause, that other commaunders also are placed in front, and in the eye of the souldiers that theire valour & forwardnes may bread an honest emulation in the souldiers to doe, as they doe. Besides, the first place is most beseeming him, that best deserveth, and the more valiant a man is, the more hee desireth to shewe it in the face of the enemy, thereby to winne himself honor, and reputation. Furthermore, hee may doe best service in the front, by entring into the enemies battaile, and making way for the rest. Not vnlike a sworde, whose edge maketh speedy passage into the thing, it cutteth, and draweth after it the rest of the iron, bee it never so blunt. In the front, the ranke of the file leaders giue the push to gaine the field. Which reason I thinke lead* [a] *Gorgidas the first institutor of the Theban* Hieros Lochos, *not to make an entire troupe thereof apart, but to place it man by man in the first ranke of the Phalange. Lastly the sight of the file leaders, being the choice of the armie, both for stature, and resolution (for* [b] *so Ælian would haue them)* [c] *breads a terrour in the minde of the enemy. Who, seeing such gallants in the front, haue cause to imagine that the rest of the armie, which they see not, is like to those they see. And, being never so valiant, they had rather haue to doe with weake, and relenting then stout, and resolute adversaries. As at the battaile of Cannæ* [d] *Annibal answered one, that brought him newes, that the Consull had commanded the horse men to alight, and fight one foote,* how much rather would I, quoth hee, hee had delivered them bound into my hands. *I haue heard many hold opinion, that the manner of the Græcians, to bring theire best men first to fight, is contra-*

a Plutarch in Pelopida.

b Aelian cap. 13

c Leo ca. 4 §. 73

d Liv. decad. 3 51

ry

ry to the inſtitution of the Romans, who held the Triarij (theire eldeſt, and beſt ſouldiers) in the rear, and brought them not to ioyne, till both the Haſtati, and Principes were beaten, or retired. But if wee conſider the diuerſity of both theire embattailings, wee ſhall ſee noe great difference, or at leſt wee ſhall ſee, that the reaſon of placing their-beſt men was not much different. The Græcians in framing theire foure-fold Phalange made in length an euen front of a 1024. files. The files were 16. deepe. and the beſt men therefore in front, becauſe being placed in the midſt, or in the reare, there would haue beene no vſe of theire valour, and the Phalange might haue beene broken, before it had come to theire turnes to fight. The Romans contrary-wiſe, in ordering a Legion, made many maniples, and gaue the front to the Haſtati, the middeſt to the Principes, the reare to the Triarij. Nowe the Triarij being ordered in the Reare, might at the beginning bee brought to fight in Front, if need were; being noe need, they kept theire place, till their Generalls found it fitt to call vpon them. So then this is the difference. The File-leaders of the Græcians had the Front, becauſe otherwiſe in ſo deep a body, as the Phalange was, they could not haue come to fight: The Triarij might alwayes haue beene imployed in Front, in flanke, or in the reare, as pleaſed the Generall. And that the Romans alſo in theire ſeuerall Maniples placed theire beſt men in Front, I cannot doubt. There ſtood the Centurions, which were the leaders of the Maniples, and in reaſon were to bee ſeconded with the beſt men vnder theire commaund. [a] C. Craſtinus may ſerue for an example whoe being noe Centurion, but an Euocate, in the battaile of Pharſaly betwixt Cæſar & Pompey, bidde his Manipulers (they were of the Maniple, which hee once commaunded) to followe him, and ſaid hee would make his Generall giue him thanks aliue, or dead. *Yet muſt I confeſſe, that the front was not the proper place of the Euocates. But hee choſe the front, and held it a place worthy of his valour. It is ſaid of [b] Catiline that, when hee fought with C. Antonius,* hee placed in the front of his army, all the choſen Centurions, and Euocates, and beſides of common ſouldiers ſuch, as were beſt armed. [c] *Livy ſpeaking of a fight betwixt the Romans, and the Latines, and deſcribing the forme of the Roman battaile, after hee had limited the place of the* Haſtati, & Principes, *writeth thus of the* Triarij. *After the* enſignes (*hee meaneth the* Standards *of the Legions*) *not the Enſignes of Maniples,* were ten other Maniples; whereof every one had three Enſignes. The firſt Enſigne led the Triarij, ould ſouldiers of tryed valor, the next the Rorarij, not ſoe well eſteemed for ſtrength in either age, or deeds, the third the Accenſi, a troupe of leſt truſt, which was the cauſe, that they were caſt in the reare. *The Accenſi were put in the reare, becauſe there was noe great* opinion of theire valor; *the Triarij had the front, becauſe they were* ould ſouldiers, and had beene ſufficiently tryed. *Soe then in dividing of their armie into ſmall bodies, or battailions, the Romans differed from the Græcians: in placing the beſt men of theire maniples in front, they obſerved the ſame manner, that the Græcians did in placing theire file-leaders in the firſt ranke of the Phalange.*

a Cæſar de bell. ciuili lib. 3.

b Saluſt. de coniur. Catilin.

c Liuius decad. 1 lib. 8. pag. 214. A

2 A verſe] *I haue tranſlated* ſtichos *a verſe. The more vſuall ſignification is a rowe of any thing placed orderly.* [d] *Soe Xenophon applieth it to trees, which were planted orderly one after another; and* [e] *Euſtathius to the ſtanding of dauncers one after another in depth euen as our ſouldiers are placed one after another in* file. [f] *Iulius Pollux alſo acknowledgeth, that there were files, and ranks in* Choro, *that is in daunces vppon the ſtage.* [g] *But Suidas ſaith it was commonly taken for a line, which was read from the left to right hand. And to ſay the truth a verſe, as wee read at this day, and as they read, when Ælian wrote this treatiſe, rather reſembleth* a ranke *then a file; becauſe in* a ranke *men ſtand ſide to ſide, as words doe being placed in a line. Yet becauſe the word is receiued by vſe in that other ſence, wee muſt like wiſe admitte the ſame.*

d Xenop. in Oeconom. 830. C.

e Euſtat. in Iliad

f Iul. Pollux. lib. 4. cap 10.

g Suidas. in verbo, στίχος.

3 A decury] *This in Greeke Ælian calleth* Decania, *a word, which in this sence I find in no other Author, then in him, and in Suidas.* [a] *Xenophon calleth it* Decas: *soe doeth* [b] *Vrbicius and* [c] *Arrian, and likewise Hesychius.* [d] *Leo calleth it* decarchian *and* Akian.

a Xenop. Cyrop
b Etymologicon magn. in strat.
c Arrian. lib. 7. 164. C.
d Leo cap. 4 §. 68. 69.

4 An Enomotie] *The word cometh from* omnymi *to sweare, not of* omos *a shoulder, as Robortellus, and Patricius immagine; of whom the first translateth it in latine* Intergutio, *the other in Italian* Spalaggione, *as it were a backing; Vpon this conceite, I thinke, because in a file the whole number standeth one at the backe of another.* [e] *Suidas saith:* Enomotia is a body militarie amongst the Lacedemonians of 32 men, and is soe called, becaus̃e they take theire othe together, not to forsake the place assigned them in battaile. *With whom agreeth the great* [f] *Etymologicon; and* [g] *Hesychius likewise; who termeth it* a body militarie, that taketh an othe and sweareth by the sacrifice, *which is offered at such time, as they goe into the field. And surely you shall not finde the word* Enomotia *applied to other souldiers, then the Lacedemonians, or else to them, that the Lacedemonians commanded: vntill it was afterward taken vp by the Macedonians.* [h] *Iulius Pollux expresly noteth, that* Moira, *and* Enomotia, *are proper appellations of the Lacedemonians, given to certaine of theire militarie bodies. Albeit both the text bee corrupted in Pollux, having* Eunomotia *for* Enomotia, *& the interpreter hath worse trãslated it, rẽdring* Enomotia, militarie discipline, *&* Moira a duty. *As the Lochos is great, or little, so is the* Enomotia. *The Lacedemonian* Enomotia *was 32. men, the* Lochos *being 512. but the file of Ælian being 16. and the* Enomotie *noe more,* then the fourth part of a file *the* Enomotie *must conteine* noe more then foure men. *One of euery of these foure must bee a commander; who is called* Enomotarcha, *or the commander of that* Enomotie. *So that in the whole file, consisting of 16. there ought to bee foure* Enomotarchas. *Where they should stand in the file, is a question. Patricius maketh the file-leader the first* Enomotarcha, *the fift man, the second, the ninth man, the third, & the 13 man the fourth; excluding the bringer vp, whom notwithstanding hee acknowledgeth to bee the second man of the file, and in dignitie next to the file-leader. I am of another opinion; and yet allowe the places of the first, fift, and ninth, but thinke the bringer-vp ought to bee the last* Enomotarcha: [i] *Arrian confirmeth my opinion: who writeth thus:* Alexander returning to Babilon, found Pruceſtes newly come out of Persia, bringing with him 20000. Persians. Then commending the Persians for theire obedience in all things to Pruceſtes, and Pruceſtes for his care, and diligence, in ordering them, hee reparted them into bands according to the Macedonian manner. Over every file hee appointed a Macedonian file-leader to command, and next a Macedonian dimærite, and a Decastater, so called of the paye hee had, which was lesse then Dimærites, and more then the common souldiers; then twelue Persians, and last of all the file a Macedonian, who also was a Decastater. So that in the whole file there were foure Macedonians, three, whose pay was more, then the common souldiers, and a file-leader the fourth, and more over 12. Persians. So Arrian. *Out of which wordes wee may learne first the number of the Macedonian file, which consisted of* 12. Persians, and 4. Macedonians, in all 16. *the number, that Ælian requireth in his file. Next,* that the Enomotarchs, or commanders of the foure parts of the file, were likewise 4. *Lastly that the* bringer-vp was one of the foure *by expresse words of Arrian, which is contrarie to the opinion of Patricius, and whereas Arrian termeth the third* Enomotarch, Decastateros *of the pay, hee received, it is to bee vnderstood, that* Stater *was a piece of coine, of the weight of foure* dragmes *of* Athens *whereof the*

Patricius paralle. milit. part. 14 173 & part 2. 154.
e Suidas in Enomotia.
f Etymol magnum in Enometis
g Hesyc. in Enomotia.
h Iol Pollux lib 1. cap. 10.
i Arr. l. 7. 164. C

Enomotarch *had ten by the moneth. The* dragme *was of value ſeven pence ſterling, and the* Stater, *conteyning foure* dragmes, *two ſhillings and foure pence ſterling; and ten of them were valued at twenty three ſhillings and foure pence. Which was the pay of the ſecond* Enomotarch, *and of the bringer-vp, as Arrian affirmeth.*

5 And the Commaunder Dimærites] *About the* Dimerite *Arrian, and Ælian, differ. Suidas leaveth the matter vncertaine, ſaieng the* Dimerite *is commander of the* half-file, *but pointeth not out, which is hee. Arrian diſtinguiſheth the* Dimerite *from the* bringer-vp, and giveth a greater pay to the Dimerite, *then to* the bringer-vp. The bringer-vp, *he ſaith, was noe more then* Decaſtateros, *where as the* Dimerite *had a greater pay. But Ælian twice in this chapter affirmeth, that the* bringer-vp *was the* Dimerite, *and addeth hee ought to bee the ſecond man of worth in the file. And that the place of the* reare *is not much inferior to the* front, [a] *Cyrus teacheth his* bringers-vp *in Xenophon in theſe words;* You haue a place *ſaith he* no leſſe honorable, then they, that ſtand in front. For being in the reare, and ſeeing & encouraging them, that behaue themſelues valiantly, you make them more valiant, and the remiſſe and backward you incite, & ſpurre on, likewiſe to doe as well, as the reſt. [b] *Leo appointeth two Officers to a* file, *the* file-leader, *and the* bringer-vp, *& ſo maketh the* bringer-vp *the ſecond perſon of the* file. *The reare being then the ſecond place of the* file, *I conceiue no reaſon, why, as the* file-leader *commandeth the one half of the* file, *ſo the* bringer-vp *ſhould not bee the* Dimerite, *and command the other; and I rather aſſent to Ælian, that of purpoſe deſcribeth the particulers of this arte, as hee findeth them ſet downe in the auncient Tactick, then to Arrian, that, writing the hiſtorie of the deeds of Alexander, ſtumbleth by chance vpon theſe things not greatly incident to his narration. Yet may there bee a reſonable conſtruction of both their meanings, if wee conſider the ſeverall reſpects of the offices of theſe* Enomotarchs. *For the middlemoſt* Enomotarch *may bee termed the* Dimerite *in regard he ſtandeth in the head of the ſecond* half-file, *and in doubling the* front *and ſome other motions leadeth it: the* bringer-vp *becauſe he abſolutly governeth it, and ſeeth that directions, given by higher officers, bee executed.*

[a] Xenop. Cyrop. lib. 3 82. D

[b] Leo. cap. 4. §. 71, 72.

6 It behoveth that the file-leader bee more ſufficient] *The* file-leader *and* bringers-vp *ought to bee the moſt ſufficient, becauſe they haue the whole governement of the* file, *the one in the* front, *the other in the* reare. *The reſt are vnder them, and to bee called by the names of* leaders, *and* followers. *But yet is there a further* diſpoſition *of the* file, *which, as I finde it in* [c] *Leo, I will ſett downe. His words ſound thus:* ouer the other ſixteen you are to appoint a file-leader (as hee is termed) reſolute, and fitt for ſervice, and eight of theſe ſixteen, that ſhall bee found fitteſt, you ſhall place in the front, and reare, of the file, foure in the front, namely in the firſt, ſecond, third, and fourth place, other foure in the reare, in the ſixteenth, fifteenth, foureteenth, and thirteenth place, that the front and reare may be *ſtrengthened* with foure men a piece. The weaker are to bee placed in the midſt of the file. *This counſell, or rather precept, of Leo hath this reaſon. The* front, *and the* reare, *are the principall places the enemy commonly giveth vpon. The* front *wee alwaies turne againſt the enemy, if we can. The* reare *the enemy ſeeketh to attache, and by it to diſtreſſe vs, if hee can. The* flanks *for the moſt part are ſecured by the horſe, and light-armed. For Leo placeth the light-armed, and horſe in the* flanks. *Soe theſe two places, being moſt ſubiect to the violence of the enemy, require extraordinarie care, and aſſurance. As for the weakeſt, which are in the midſt, they never come to ſtrike ſtroke, but after the* front, *and* reare, *are broken,* [d] *In another place hee writeth to this effect: your* Contubernies *(the ſouldiers that cabin together) you ſhal order according to fiue men, or to ten, or to foure,*

[c] Leo ca. 4. §. 69

[d] Leo ca 4 §. 14

or

or to eight, or to ſixteen, as you ſhall find moſt convenient, that being bound one to another with mutuall acquaintance, they may fight one for another in battaile and bee more valiant againſt the enemy. But you ſhall doe more wiſely, if when you are to joyne, you place brothers by brothers, & friends by friends. For when hee, that fighteth, hath an entierly beloved frend ſtanding next behind him, hee muſt of neceſſity haſard himſelf with more egerneſſe for his frends ſake. And the other being aſhamed not to requite one, that ſuſtaines ſuch danger in his behalfe, will hardly bee brought to forſake his friend ſo well deſeruing, and firſt betake himſelfe to his feete. *The ſame is the adviſe of Onoſander, and was much practiſed in auncient time. The* Lochos Hieros, *or* Holy-band, *of the Thebans (whereof I ſpake before) conſiſted all of friends, that had bound themſelues one to another in friendſhip. With this* Holy-band [a] *Pelopidas gaue the firſt diſgracefull overthrow to the Lacedæmonians, that ever they had. Of this band* [b] *Plutarch writeth, that it was never beaten vntill the battaile of Chæronæa, when Philip the father of Alexander vanquiſht the Athenian, and Theban forces both together.* After which battaile Phillip ſurueying the dead bodies, and comming to the place, where theſe three hundred lay, all cloſe mingled one with another, and ſtrooken through with the Macedonian pikes, hee wondred greatly, and hearing that it was the band of louers, and beloued, wept, and ſaid, evilly may they periſh, that ſuſpect any filthines in deede, or ſuffering, to haue been practiſed amongſt ſuch men. *Cyrus the elder had his* Homotimos *nouriſhed vp together, and Alexander his* Hetairos; *whoſe extraordinarie ſervice appeared in all theire battailes.* [c] *Diodorus Siculus writeth of Seſooſis the Ægyptian King to this effect:* at the birth of Seſooſis his father did a magnificent and royall deed. For gathering together all the children of Ægipt, that were borne the ſame day, and ſetting over them ſome to nouriſh and governe them, hee gaue the ſame education, and inſtitution, to them all, conceiving that they, that were brought vp together, & partakers of the ſame liberty, would become the beſt affected, and moſt aſſured fellow helpers in warre. *This was the iudgement of Myris, the father of Seſooſis, King of Ægipt, in providing aſſured aſſiſtance to his ſonne for the conquering of the whole world, which by certeine blinde prophecies was promiſed him. Now what little truſt theire is to bee given to men, that are not acquainted one with another, Pompey that great Captaine of the Romans ſheweth in his epiſtle to* Domitius: [d] For men, *ſaith hee,* are not quickly to be aſſembled hether by muſters, and if wee had them, you are not ignorant how much they may bee relyed vpon, being vnacquainted to fight againſt ould Legions. *Yet hath Leo another mixture in his files. For hee would haue the ould, and new ſouldiers put together in one file.* Leaſt *ſaith hee,* the ould being by themſelues alone, proue weake, and of ſmall force, and the yong diſorderly, having litle experience. For the one, albeit ould, yet are well acquainted with ſervice, the other albeit young, and valiant, yet are vnskilfull.

a Plutarch in Pelopida.

b Plutarch. ibib.

c Diod. Sicul. lib. 1. 34.

d Cicer. ad Atticum li. 8. epiſt. 20

For the Enomoties, dimerie, and file, ſee the figure.

Ioyning of Files.

Chap. VI.

1 IOyning of *Files*, is when one *file* is layed *flank-wiſe* to another, the *Leader* of the ſecond *file* to the *Leader* of the firſt, and the follower of the ſecond *File-leader* to the follower of the firſt, and ſo the reſt. Every man that *ranketh*

is

is called *Paraſtates*, as for example the *Leader* of the ſecond *file*, to the *Leader* of the firſt, and ſo theire next *followers*, and the reſt. As often then, as the ſecond *file*, the third, the fourth, and ſo the reſt are layd *flank-wiſe* to the firſt, it is named *Ioyning of files*.

Notes.

1 IOyning of files is] *A file of it ſelf will worke litle effect againſt an enemy. For what can a man alone in front doe? Cyrus in* [a] *Xenophon wiſheth*, that, where as the Ægiptians ſtood a hundred in depth, they had beene in depth a thowſand, *for ſoe, ſaith hee, wee ſhould haue the fewer hands to fight againſt. The* ranke *bringeth the multitude of hands to fight. And it is held, that the more hands are with conveniency brought to fight, the more is his advantage, that bringeth them. This is done by ioyning files together, out of which ioyning, ranks ſpring, and* ranks *the more they increaſe, and extend themſelues in length, the more hands are ready to encounter the enemy. Now, as it was ſaid in the former chapter, that files conſiſted of leaders, and followers, from the firſt to the laſt, ſo is it in this chapter ſaide, that* ranks *conſiſt of ſide men from one end of the length of the Phalange to the other: Fewe, or many men, placed ſide to ſide in a right* line *make a* ranke; *as in two, or three files ioyned together, there are ſixteen* ranks *of two, or three men in a* ranke. *And the two or three file-leaders make the firſt* ranke, *theire followers the next, and ſoe the reſt vntill you come to the ſixteenth. The like falleth out in more files.* [b] *Vrbicius ſaith, that the file leaders make the* front (*as they terme it*) *of the Phalange, which they call alſo the firſt* ranke. *And further, hee ſaith, they, that runne in an even line betwixt the two wings, the right, and the left, are ſaid to bee* Paraſtatai, *or* ſidemen. *Likewiſe: the laſt* ranke *is called* Oura, *or the* reare, *and the commander* Ouragos, *the bringer-vp. So Vrbicius agreeing with Ælian. Now, out of theſe two chapters, is a cleare diſtinction of the names of ſouldiers, that by reaſon of theire poſture, or place, in battaile make the diverſitie of* files, *and* ranks. *They, that make files are* Protoſtatai, *firſt-ſtanders, &* Epiſtatai, *after-ſtanders; which are by vs commonly called* Leaders, *and* followers. *For theſe two ſaith Ælian make the* file *from the beginning to the end.* Paraſtatai *ſide-ſtanders, or, as wee terme them, ſidemen, make the* ranks. *And if you meaſure the length of the Phalange, you doe it by number of men in the* ranke, *if the depth by number of men in the* file.

[a] Xenop. Cyrop. lib. 6. 167.

[b] Etymol. magn. in the word Suratoi.

Of a Phalange, the length, and depth thereof: of rankinge, and filinge; the diviſion of the Phalange into winges: the place of the armed foote, of the light-armed, and of the Horſe.

Chap. VII.

1 THE whole bodie of the multitude of *files* is termed a *Phalange:* whoſe 2 length is the firſt *ranke* of *file-leaders*, and is named, the *front*, the *face*, the *edge of the battaile*, the *ranke*, the *mouth*, the *Commaunders*, the *fore-ſtanders*, & the *head of the files*.

As much of the *Phalange*, as ſtretcheth backward from the *front* to the *reare*, 3 is named the depth: The bearing ſtraight foorth of *ſide-men* in length, whether

ther they bee *Leaders*, or *followers*, is *ranking*. And the ſtanding of *Leaders* and *followers* directlie in a line in depth, is *filing*.

A *Phalange* is divided into two whole partes beginning at the middle ſection of the *front*, and houlding on cleane through to the vttermoſt parte of the depth; whereof the one half is called the [4] *right wing*, and *head*, the other half the *left winge*, and *taile*. [5] The two fold ſection it ſelf, that divideth the length, hath the name of the *Navell*, and the *Mouth*. [6] The *Light-armed* are placed after the *Phalange* of the *Armed*, and behind them the *Horſe*. Yet if occaſion require, both *light-armed*, and *Horſe* are otherwiſe diſpoſed, as after in this diſcourſe will appeare.

Notes.

THE whole body of multitude of files is termed a Phalange] *Ioyning of files makes ranks, and a ſufficient number of* files, *and* ranks *together, make a body, which is called a* Phalange. *For that name is given to any entire body of an indifferent greatneſſe, compacted, and vnited for fight. Heſychius deriveth the originall of the word* Apo tou pelas allelois inai; from the ſtanding of the ſouldiers in battaile neere one to another. *Suidas in the ſame ſence, albeit hee differ a litle in words, ſaith, the* Phalanges *are ſo called* apo tou pelaſai anchi, *of approching one neere to an other. The great Etymologicon goeth yet a little further, and ſaith, that* Phalanges *are as it were* Palanges para to pelas kai eggys einai, *as it were* Pelangys. *Theſe are the coniectures about the originall of the name. Which of them is trueſt, is not greatly to the purpoſe. It is enough to vnderſtand, in what ſence the word* Phalange *is commonly taken amongſt Tactick writers, who, as I ſaid, in a generall ſignification call any great body of armed gathered together, and vnited for fight, a* Phalange. *Soe* [a] *Cæſar nameth the battaile of the Heluetians, into which they caſt themſelues, when they fought againſt him, and likewiſe the battaile of Arioviſtus, a* Phalange. *So ſpeaketh* [b] *Xenophon of the* Plæſium, *or ſquare holow battaile, into which the Græcians, that went with Cyrus the younger into Perſia, faſhioned themſelues at their returne out of Perſia. And the ſame* [c] *Xenophon ſaith, the horſe of the Gracians, when they were to encounter the Perſians, ordered themſelues foure in depth, in forme of a* Phalange. *And* [d] *Arrian, that the Perſians at the River Granicus were ordered in a long* Phalange, *and* [e] *Xenophon againe diſcourſing how Iphicrates exerciſed his nauie, when hee expected to fight with the Lacedæmonians, ſaith,* hee ſometimes lead in a wing (that is in a large depth) ſometimes in forme of a Phalange, in a broad front. *The firſt inventer of the* Phalange *is thought to bee Pan the generall of Bacchus his armie. Polyænus ſaith:* [f] Pan was the commaunder of Bacchus his armie. This man was the firſt that invented the order of a battaile, called it a Phalange, and parted it into the Right, and left wing. For which cauſe Poets faine, that Pan carieth two hornes vpon his head. Beſides hee was the firſt, that by ſlight, and cunning caſt a feare vpon his enemies. For when Bacchus, incamping in a hollow foreſt, was advertiſed by his ſpies, that an infinite number of enemies were lodged one the further ſide, hee began to be afraide. But not Pan: who commanded the ſame night the armie of Bacchus to giue as great a ſhoute, as they could. The Rocks and hollowneſſe of the foreſt rendered it againe double to the enemy, & made ſhewe of a greater armie, then Bacchus had. Where with the enemy falling into a feare fled foorthwith. *In honour of this ſtrategem wel faine, that Eccho is Pans lone: & the cauſleſſe night-feares, which fall vpon Armyes, were attributed to Pan.*

[a] Cæſar de bell. gall. lib. 1.

[b] Xenoph. de exp. Cyri. lib. 3. 308. E

[c] Xenoph. hiſt. græc. li. 3. 499. A

[d] Arrian lib. 1. 24 F

[e] Xenoph. hiſtor. græc. lib. 5. 84. A

[f] Polyæn. lib. 1. in Pan §. 1.

So

So farre Polyenus about the inventer of the Phalange. *The number of the* Phalange *is not alwayes one. It may consiſte of ten thouſand, twenty fiue thouſand, or as many, as you liſt,* [a] *Antigonus the King of Macedony had his* Phalange *of ten thouſand.* [b] *Ptolomæus King of Ægipt, of twenty fiue thouſand.* [c] *The ten thouſand Græcians that went with Cyrus into Perſia are called a* Phalange. *What number the Helvetians, and Arioviſtus, had in theire Phalange, is not preciſelie ſet downe by Cæſar.* [d] *Yet it ſeemeth by Cæſar, that the moſt parte of the fighting multitude of the Helvetians caſt themſelues into a Phalange; and thoſe of Arioviſtus likewiſe: But Ælians* Phalange *is reſtreyned to a certeine number, as the next following Chapter will teache.*

a Polyb. lib. 2. 150 A.
b Polyb lib. 5. 408 C.
c Polyæn. lib. 2. in Clearcho. § 3.
d Cæſar. de bell. gall. lib. 1.

2 The length whereof] *The length of the Phalange is to bee accounted by the ranke not by the file. The file is but ſixteen men deep. The ranke from the pointe of one wing to the pointe of the other conteyneth a thouſand, and twenty foure men in Ælians Phalange. So that the files being ſhort in compariſon of the ranks, it is reaſon, that the length of the Phalange bee meaſured according to the ranke, not to the file.* [e] *Suidas agreeth with Ælian ſayeng, that the length of the Phalange is the firſt* Syntagma *(the firſt ranke) of file-leaders, which is ordered in a right line, ſtretching from one wing to another, and is called the* face, *and the* mouth, *and the* front, *& the* edge, *and the* firſt-filing, *and the* firſt ſtanders *of the battaile. The next rowe, lyeng Parallel to this, is called the ſecond* ranke, *and the third, the third* ranke, *and ſoe the reſt. The* length *is termed in Greeke* Mecos, *to which is oppoſed the* depth, *which is named* Bathos. *Neither is there in true account any other dimenſions in a Phalange, beſides the* length, *and the* depth, *which are in this chapter mentioned by Ælian. Other names are given in Greeke writers ſometimes, but they ſignifie either the one, or the other.*

e Suidas in Mecos.

3 Is named the depth] *As the length runneth along by front from one wing to another, ſo the depth beareth backward from the front to the reare. The depth is properly called* Bathos, *as I ſaid.* [f] *And* Bathera Phalanx, *is a deepe Phalange.* [g] *And* [g] *Arrian ſaith, Alexander ordered his Phalange* es Bathos, *in depth. And* [h] *Polybius, that the Romans made theire battaile much ſhorter then before, but much deeper,* Bathyteran. *And as it is called* Bathos, *for the moſt part, ſo is it by* [i] *Leo called alſo* Pachos. *For the depth of a file is by him termed depth, or Thicknes,* Bathos etoi Pachos, *in two ſeverall chapters of his Tacticks; not in reſpect of the file it ſelfe, which is no more then a long line, as it were, and carieth neither Thicknes nor breadth, but in reſpect of the Phalange, the depth whereof is meaſured by the file. And in the fourth, the twelfth, and fourteenth chapters hee termeth the depth of the Phalange it ſelf (Thicknes)* Pachos *alone with out adding* Bathos; *ſhewing thereby, that* Pachos *alſo ſignifieth the dimenſion of the Phalange from the* front *to the* reare. *But where ſome are of opinion, that* Platos, *breadth, ought to bee read in thoſe places in ſtede of* Pachos, *Thicknes, they perſwade mee not to bee of theire mind.* [k] *For Ælian himſelf giveth an Attenuation, or Thinning, (which hee calleth* Liptyſmos) *to the Phalange: and that cannot bee vnderſtood, vnleſſe there were in it a kind of Thicknes before. And to make it more plaine, hee ſaith, that this* Leptyſinos *is, when the depth of the Phalange is gathered vp and from ſixteen men it becometh a leſſe number. So that the Thicknes of the Phalange is the full ſixteen, which is alſo the depth, and making of it Thinner is to leſſen the depth. To a Place* Platos *is fitly attributed, a Place being onely* ſuperficies, *which conſiſteth of* longitude *and* latitude. [l] *So Poliænus ſpeaking of a valley, wherein an ambuſh was layde to entrap Alexander, ſaith, the length ſtretched farre out, but the breadth,* Platos, *was narrowed to foure furlongs. The name of* Platos *is likewiſe given to a* place *by* [m] *Polybius. But to ſay the*

f Diod. Sicul. 258 57ſ.
g Arrian lib. 1. 3 C.
h Polyb. lib. 1. 35 A.
i Leo cap. 4. §. 6 & cap. 14. §. 108. & cap 7. § 54. cap. 12 § 40. 46. 47.
k after cap. 50.
l Polyen. lib. 4. in Alexand. §. 12
m Polyb. lib. 12. 664 D.

truth Platos in a Phalange rather ſignifieth the length, then the depth, as appeareth by Ælian after in the foure and fourty chapter. And [a] Leo calleth the front of the Phalange Platos, and when hee would haue the front enlarged, or doubled, hee giveth this word of direction Plátynon pròs tà amphótera mére, enlarge the front on both ſides.

a Leo ca.7.§.82

4 The right wing] That which in the Engliſh toung is called a wing, is termed in Greeke Keras a horne. Wee in our warres of auncient time divided our armies into three parts, The vantgarde, the battaile, and the reare-warde: and, when wee came to fight, ſet them for the moſt parte in an even front, the battaile in the middeſt, on the right hand, the vant-garde, which was called the right-wing, on the left, the reare-warde which was called the left-wing. Properly enough for our embattailing. For the battaile is, as it were, the body, and the vant-garde, and reare-warde, are the wings, which in a manner ſticke out from the body, and whereby the body is ſupported: that, that wee call wings, the Græcians, and Romans called horns in the battaile. The word Keras ſignifieth a point bearing out from the height, or ends, of any thing. It is vſed for the toppe of Rocks, and for promontories, and ſuch like; And in a Phalange it properly ſignifieth the two points (the right and the left) of the winges. The Engliſh word wing I am faine to retaine, becauſe it is familiar, and in vſe. Ælian heere will haue the wings to ſtretche out from the middle ſection to either point (the right and left) of the Phalange; vnder which appellation muſt fall to the right wing the whole ſpace, that beginneth at the middle intervall, and runneth along to the corner of the battaile on the right hand, to the left, all that is comprehended betwixt the ſame ſpace, and the left corner of the battaile.

5 The two-fould ſection] In Greeke it is named Dichotomia: becauſe it parteth, and divideth the Phalange into two even parts, beginning at the front, and ſtretching out to the reare. And Ælian in the tenth chapter of this booke nameth it Apotome. But heere hee ſpeaketh of no more intervalls, or partitions, of the Phalange, then of this one in the midſt. I would thinke there ſhould bee more. [b] Onoſander ſaith: let there bee certaine intervalls in your battaile, that if your enemy advance, your light-armed after they haue ſpent their miſſiue weapons, and before the Phalanges joyne, may retire leaſurely in the intervalls, and without diſorder come behinde to the reare. For it is not ſafe for them in retiring to fetch a compaſſe about the whole armie, or to turne in againe on the outſide of the winge. For the enemy, haſting to come to hands, would eaſily prevent, and intercept, them in the middeſt; ſo that they neither ſhould bee able to breake through the armed, already cloſed for fight, and falling vpon their owne weapons, they muſt needes diſorder their owne people, every man after other ſeeking to finde a way through them to eſcape the danger hee is in. Thus much Onoſander; from whom wee may learne, both that their ought to bee more ſections in the Phalange, then one, and that the inſtitution of them had this cheefe end, to receiue the light-armed in their ſpaces, after they had skirmiſhed with the enemy, and were by them forced to retire. I may adde, that Ælian placing the light-armed in the reare of the Phalange if you giue but one ſection vnto it, it will be as hard for them, to advance, and ſerue, before the front, as it will bee to retreat after their ſervice done. It ſeemeth, that [c] Leo giveth three intervalls to the Phalange of the auncient Tacticks. Hee ſaith: they oppoſed the bodies of the armed againſt the enemy, and divided them into foure parts, the right, and left, and the middle-right, and middle-left parte. Making ſo many parts, the parts muſt bee diſtinguiſhed (as I collect) by intervalls, which ought to bee one after

b Onoſander ca. 29 Leo, ca. § 106

c Leo ca.4.§.18

after the first body of the right-wing, another after the second, which is the middle section, the third after the third. And this Third section is bounded with the fourth body, which maketh the point of the left-wing. For if the Phalange were whole, and entire, without more intervalls then one, how could there bee foure parts? For esteeming them by Phalangarchies, without leauing spaces betweene, it could not bee saide, there were but foure parts of the Phalange, considering, that as well the Merarchies, Chiliarchies, Pentecosiarchies, Syntagmataes, are parts of it, as the Phalangarchies. But being distinguished by partition of intervalls, the foure Phalangarchies become foure parts, namely the right, left, middle-right and middle-left: as Leo heere termeth them. The same [a] Leo speaketh after more plainely, enioyning his generall to seperate, and disioyne Diachorizein the whole number of his armie into foure parts. For, as Choris signifieth a part or severed, so Diachorizo, being derived from it, signifieth to put asunder, or sette a part. [b] Suidas is yet a little more cleare. A Phalangarchie, saith he, is two Merarchies of foure thowsand and ninty six men. This as some saye is the section, Apotome, of the wing, as other, it is a Meros. Of auncient time it was called Strategia, and the commander Strategos, but nowe hee is termed Phalangarcha. Suidas maketh the wing to haue a partition or section, and saith, some call a Phalangarchie by the name of this section, Before wee heard out of Ælian, that the wing (right or left) did stretche out from the middle section to the outward most point of the battaile on either side. And as the middle section divideth the Phalange in two parts, which are called wings, so this section (spoken of by Suidas) being in the middest of the wing divided the wing into two parts. To call a Phalangarchie (which is a body consisting of foure thowsand and ninty six men) a section, is, I confesse, an vnproper speach, but tolerable notwithstanding, considering that the whole foure-folde Phalange is composed of the foure Phalangarchies, and that the section of the right-wing beginneth at the left hand file, or inward point of the right hand Phalangarchie, and endeth at the right hand file of the second Phalangarchie. And wee are not to expect the same exactnesse of speach from souldiers, that is common to men skillfull in the liberall sciences. Souldiers, that professe action, haue their end, if they bee vnderstood of those, they commande. Artiles are contemned, that clothe not the precepts of their arts with elegant, fitt, and exact termes. Seeing then the beginning of the section of the wing is at the flanke of the first Phalangarchie on either side of the Phalange, wee may after a sort terme the Phalangarchie a section of the wing, because it boundeth the section. At least by this place of Suidas wee may gather, that there was an intervall in either wing, which in reason ought to bee in the middest of the wing, and to lye betwixt the two Phalangarchies. For so many there are in one wing. [c] Polybius telleth of Philopæmen, that, fighting against Machanidas the Tyrant of Lacedæmon, after hee had placed the light-armed, the Lanciers, and Illyrians ioyntly in one front, hee added in the same right line the Phalange distinguished into bodies according to Merarchies and divided by severall distances. I translate Speiredon distinguished into bodyes, because Speira signifieth a militarie body amongst the Græcians, and is by the Græcians, that wrote the Roman historie, vsed sometime for a Legion, and sometime for a Cohort. And it seemeth that Spiredon is heere by Polybius put in the same sence that Eis Speiran is by [d] Plutarch: who mentioning the reformation touching affaires militarie, which the same Philopæmen brought in amongst the Achaians, writeth thus: their manner and forme of embattailing was not vsually parcelled out Eis Speiran, that is (as I interprete it) in severall bodies, but vsing a

a Leo ca 4. §. 65

b Suidas in the word Phalangarchia.

c Polyb. lib. 11. 631. D.

d Plut. in Philopæmen.

Phalange, which had neither protenſion of pikes, nor cloſing of targets in front (as the Macedonian manner is) they were eaſily foiled, and broken, by the enemy. The meaning of Plutarch is (as I conceiue) that the Achaians in former times vſed to order theire Phalange in a continued length without intervalls which Philopœmen reformed, and taught them to make diviſions by intervalls; And the practiſe of Philopœmen is the beſt interpreter of his owne counſell to the Achaians. This practiſe Polybius ſetteth downe to bee the diviſion of his Phalange Kata tele ſpeiredon en diaſtemaſi into bodies diſtinguiſhed by intervalls according to Merarchies. Polybius alſo, to ſhewe, what bodies they were, vſeth the word Tele, which I tranſlate Merarchies, having my warant out of [a] Ælian: who ſaith a Merarchie conſiſteth of two Chiliarchies, and conteineth two thowſand and fourty eight men, and a hundred and twenty foure files; and addeth, that it is of ſome called a Telos, and the leader a Telarch. A man may doubt ſeeing Philopœmen made an intervall betwixt every Merarchie, whether hee made ſeven diviſions, or no: For in Ælians Phalange there are eight Merarchies, betwixt every of which if a diſtance were, there muſt needs ariſe ſeven intervalls. To cleare this doubt wee muſt vnderſtand, that the Phalanges of the Græcians were not alwaies of the ſame number, as I noted before. Ælians, and the Macedonian Phalange, conſiſted of ſixteen thowſand and odde. Antigonus had but ten thowſand. Demetrius eleuen thowſand. Other had more, the Lacedæmonians leſſe, and likewiſe the Græcians for the moſt part. And it ſeemeth, the Phalange of Philopœmen was no more, then eight thowſand, and odde, in which number there are but foure Merarchies. As Ælians Phalange comprehending ſixteen thowſand and odde, wherein are foure Phalangarchies, hath likewiſe three diviſions by Phalangarchies. And yet in this Phalange of Philopœmen, if you account the file to haue but eight men (as the moſt Græcians vſed in theire files to haue) theſe foure Merarchies will poſſeſſe as much ground in front, as the Phalangarchies of Ælians Phalange doe, the file being ſixteen. Neither is it new to figure out the bodies greater, or leſſe, according to the number of the Phalange. [b] Leo commandeth his Generall, when the number will not reach to ſixteen thowſand (the number of the ould Phalange) to hould notwithſtanding ſixteen men in a file, and to divide his Phalange into foure equall parts by intervalls, excepting ſome few, which hee would haue reſerved for other vſes. To conclude Ælian him ſelf ſeemeth to acknowledge more ſections, then one, when in the tenth Chapter of this booke hee ſpeaketh of the middle ſection meſe apotome. For this word middle being a relatiue, can not bee vnderſtood with out two other at leaſt, which are placed on either ſide. And all the figures, that I haue ſeene, of a fourefold Phalange allowe three ſections, and no more, that is to ſaie, one in the middeſt, and the other two in the wings. What the diſtance and dimenſion of theſe ſections ought to bee, I finde not ſet downe. But, if I might haue leaue to coniecture, I would thinke, they ought to bee large enough for a troupe of horſe, framed wedge-wiſe, after the Macedonian manner, to paſſe through; the laſt ranke whereof being fifteen (as appeareth in the twenty chapter of this booke) and the horſe placed in the reare of the light-armed it is needfull, if vpon any occaſion they were to bee drawen through to ſerue in the front, the diſtance of the ſection ſhould bee ſufficient to giue them paſſage with out diſorder. And I am the rather confirmed in this opinion, becauſe I ſee the intervalls betwixt the Roman maniples ſo proportioned, that the Principes might paſſe through thoſe of the Haſtati, and the Triarij through thoſe of the Principes. But I proportioned out the intervalls to the horſe, not to the light-armed, for that the light-armed may bee divided into ſeverall bodies without inconvenience, but any breaking of the horſe-

[a] Aelian before cap. 9.

[b] Leo cap. 4. §. 62. 63. 64. 65.

horse-wedge *breedeth a confusion in the whole troupe. Yet where a troupe of horse may finde way, there may a* Centurie, *or* Colours, *of light-armed finde also way.*

6 The light-armed are placed after] [a] *The light-armed were diversly placed, sometimes before the front of the Phalange, which kind of placing is afterward called* Prataxis, *sometimes on the wings, and it is called* Hypotaxis, *sometimes betwixt the files of the armed fronting in a right line with them, and it was called* Entaxis, *sometimes in the reare after the Phalange, which was called* Epitaxis. *All these are spoken of by Ælian heereafter in this booke.* [b] *There is another kinde of placing the light-armed, when they are throwne into the midst of the battaile, being hollowed for that, and other purposes. Heereof Ælian likewise treateth in this booke heere-after. And albeit the most vsuall embattailling of them hath beene in the wings, yet the bestowing in the reare according to Ælians minde hath also advantages. First it concealeth theire number, which because they are shaddowed with the pikes standing before, can hardly bee discerned. Then it is easie from the reare to drawe them to any place of service without disorder, bee it* before, *on the* wings, *or behinde* the reare. *Further, it will not bee easie for the enemies horse to charge them, the armed standing before for a sure defence. Lastly, from the reare they shall bee able at all times to anoye the enemy, before the battaile ioynes, as soone as the battaile ioynes, and all the time of fight. Neither doth this manner of embattailing want examples of the ould historie of the Græcians.* [c] *The embattailing of Cyrus the elders armie, in Xenophon, hath the light-armed in the reare. I will set downe the effect of Cyrus words at large because they conteine the ordering of an armie to fight according to the iudgement of Xenophon.* Cyrus then being to trye a battaile with Cræsus thus directs his Commanders: you, saith hee, Araspes take your place in the right wing, as you now doe, and you the other Myriarches, as you are acoustomed. For when the fight is once a foote, noe Chariot may change horses; and command the Taxiarches, and file-leaders, to order theire files every one divided in two parts Phalange-wise, that is each half fronting one with another in a right line. A file conteineth foure an twenty men. Then saide one of the Myriarches, doe you thinke Sir, that wee shall bee able, in this order, to encounter so deep a Phalange, as the enemies? Cyrus answered, the Phalanges that are deeper, then may with theire armes reach the enemy, are they fitt thinke you either to annoye the enemy, or profitte theire frindes? For my part I could wish those, that are ranged 100. in depth, to bee in depth a thowsand. For so should wee haue the fewer to fight with all. The number, that I giue for the depth of the Phalange, I doubt not, but will entirely serue for vse, and maintaine a joynt fight in every part. The Darters I will place after the armed, and after the darters the Archers. For who will sett them in front, that confesse themselues vnable to maintaine a fight hand to hand? Howe then will they hould theire grownde, if they bee sett before the armed? but being in the reare, some with darts, other with arrows, sent over the heads of the armed, will greatly endammage the enemy. And it is cleere, that wherewithall soever an enemy is endamaged, with the same a mans owne side is eased, and relieved. You therefore order your selues, as I haue appointed. As for the captaines of the Targetiers I will haue them, and theire files, stand likewise next the armed in the Reare, and after them the Archers. And you the chiefe Commaunder of the Reare

a Aelian cap. 31

b Aelian cap. 47.

c Xenop Cyrop. lid. 6 167. B.

enjoyne the other reare Commanders every man to haue an eye to thoſe vnder him, that they doe theire duties. And let them ſharply threaten the negligent, and in caſe any man treaſonably forſake his place, puniſh him with death. For it is the worke of Commanders both with word, and deed, to encourage thoſe, they command, & to make the cowards more afraide of them, then of the enemy. This is your charge, but you Euphratas, that command over the Engines, ſee that the beaſts, that drawe the Engines, and Turrets, followe the Phalange as neere, as may bee. And you Daouchus, that haue the charge of the baggage, come with your manye next after the Turrets, and let your Serieants ſeuerely puniſh them, that haſt to much before or come to ſlowly after. And you Carduchus, that rule the wagons, wherein the women are, order them next the baggage. For all theſe, comming in the reare, will both breede an opinion of multitude, and giue vs meanes to lay an ambuſh, and will force the enemy, purpoſing to encompaſſe vs, to fetche a larger compaſſe; which the larger it is, ſoe much the weaker muſt hee be. And you Artabaſus, and Artagerſas, each of you leade next after theſe, the 1000. foote you commande a piece. And you Phranuchus, and Aſiadatas, order the Chiliarchies of horſe you commande not with the Phalange, but ſet them by themſelues apart behind the wagons; and when you haue done it, repaire to vs with the reſt of the commanders. But you are to bee in a readineſſe: as if you were firſt to fight. And you the commanders of the Camel-riders place your ſelues after the wagons, and doe what Artagerſas ſhall bidde you. And you the Commanders of the Chariots, after lotts are caſt, let him, whoſe lotte it is, range himſelf, and his 100. Chariots, before the Phalange; the other two hundred, one of them is to follow, the Phalange on the right ſide, wing-wiſe, the other on the left. So farre Cyrus. *I haue rehearſed the words at large, principally to ſhewe that the light-armed in ancient time were placed ſometimes behinde the Phalange; and yet further alſo, to repreſent the manner of embattailing an armie, which was then vſuall. For heere haue you ſet downe the place of the Myriarches, & of the other commaunders, which was in front, then the place of the pikes, of the light-armed, of the reare commanders, of the Engines, of the baggage, of the wagons, wherein the women were, of the gards for the baggage, both horſe, and foote, of the Camels, and of the Chariots. And albeit many of theſe particulers agree not with our manner at this day (for wee haue neither Engines, nor Camels, nor Chariots, nor ſlings, nor darts, nor arrowes) yet is the reaſon of warre alike in all, and in our placing alſo* the fitneſſe of *ſeruice principally to bee reſpected. The place of the horſe is heere omitted by* [a] *Xenophon, which may be ſupplied out of the ſeventh booke, where Chryſanthas* Generall *of the horſe is ſaide to ſtand on the right wing of the Phalange with half the horſe, Hyſtaspas on the left with the other half. But to returne to the placing of the light-armed, the ſame* [b] *Xenophon teſtifieth, that it was the Ægyptian manner to order theire light-armed behinde, & that in the battaile betwixt Cyrus, and Cræſus, the Ægyptian archers, and darters, were with drawne ſwords compelled by the* reare-commanders *to ſhoote, and caſt theire darts. Thraſybulus in his fight againſt the thirty Tyrants ſet his armed in front, and in the reare his targetiers, and darters, without armor, and thoſe that caſt ſtones. And it ſeemeth by the words of Thraſybulus to his owne ſide, that the Tyrants did the like;* The Tyrants, *ſaith hee*, haue brought vs to a place, in which by reaſon of the ſteepneſſe they muſt aſcend, and can neither caſt ſtone, nor dart, over the heads of theire owne people, that are embattailed before. Where wee contrarywiſe, whether wee throwe jauelins, or darts, or ſtones, ſhall eaſily reache, & wound

[a] Xenop. Cyrop. lib. 7 172. C. & pag. 175. C.

[b] Xenod. Cyrop. lib. 7 179. B.

[c] Xenoph. Hiſt. græc. li. 2 472. D

[d] Xenoph hiſt. græc li. 2. 473. C

many

many of them. *The ſtones and darts of the light-armed were to flye over the front of the battaile, and that could not bee vnleſſe the light-armed were placed behinde; I will adde one example onely out of Plutarch to ſhew the ſeruice of the light-armed in the reare.* [a] *Plutarch diſcourſing of the battaile fought betwixt Sylla, and Archelaus, the Generall of Mithridates, at Cheronaa, hath thus:* Afterwards the foote forces came to joyne, the Barbarians holding out, and charging theire long pikes, and endevouring with locking theire targetts cloſe together, to mainteine the order, and cloſenes of their Phalange: The Romans on the other ſide, caſting away their darts, and drawing their ſwordes: putte by the enemies pikes in choler, to the end they might come quickly vp to them. For they eſpied, oppoſed againſt them in front 15000. of the enemies ſlaues, that were enfranchiſed by Proclamation of the Kinges generalls: & enrolled emongeſt the armed. And when the Roman *Armed* coulde hardly breake them, by reaſon of theire depth, and faſt knitting together; and of theire bouldnes in daring (contrary to the nature of ſlaues) to abide the danger of the encounter, the arrowes, and darts caſt in aboundance from the Reare, made them ſhewe their backs, and fall in a route. *Wee finde heere, that the* light-armed *from the reare effected that, which the* Armed *could not. Theſe ſlaues endured the ſhocke, and could not bee broken by the armed, and yet were defeated with Arrowes, and darts, from the Reare: Nowe for the diſtance that ſhould bee betwixt the bodies of the light-armed, and betwixt them, and the reare of the armed, Ælian ſaith nothing: I make noe doubt, but there ought to bee as great (if not greater) as in the ſections of the armed. For wee muſt vnderſtand, that the ſections, that ſerved to ſever the* Phalangarchies *one from another, muſt runne through the light-armed in depth to the reare. And by them are the* Epixenagies *to bee devided a ſunder, as the* Phalangarchies *are: with* Epixenagies *anſwer the* Phalangarchies *for number of files, albeit not in number of men. Likewiſe there ought to bee, a greater ſpace in* ranke, *and* file, *then the armed had. For the handling of miſſiue weapons, require more liberty of place, then the managing of a pike or ſworde. A dart can not bee ſent for ciblie without running two, or three, ſteppes in the delivery of it. A ſling being throwne, and circled about the head, before the ſtone, or bullet, can bee forced out to any purpoſe, will not ſuffer a neere ſtander by. In bowes, and arrowes, is the like reaſon, if they be vſed as they ought. Beſides the light-armed, in their fight are tied to noe certainty of order, or grounde, but fight diſperſedly: Soe that the more grounde they haue, the fitter they are for ſeruice. In which reſpect a large intervall croſwiſe betwixt the armed, and them, ſhould ſerue to purpoſe: it having liberty for their motion forward, and backward, as occaſion ſhould require.*

a Plut. in Sylla.

7. And behinde thē the Horſe:] *I haue not read in any greek hiſtorye, that the* horſe-men *in a ſett battell, haue beene ranged behinde the* light-armed. *The vſuall manner was to place them in the* [b] *wings. Soe did Alexander before he paſſed the River* [c] *Granicus: ſoe* [d] *at Iſſos, ſoe at* [e] *Gangamela: Soe did* [f] *Antigonus, againſt Eumenes, and Eumenes againſt Antigonus: Soe* [g] *Ptolomeus againſt Demetrius, and Demetrius againſt Ptolomeus: and in brief all the Macedonians, and the Græcians, before the Macedonians were accounted of for matter of armes: vnleſſe ſome ſpeciall cauſe moved an alteracion. And, as I ſhewed out of Xenophon, before all theire times.* [h] *Cyrus albeit, hee ſet the light Armed in the reare, notwithſtanding hee beeſtowed the horſe in the wings: Alexander having paſſed the River Iſter as long as hee marched in the corne lande, placed his horſe behinde his Phalange, when hee entred the* Champeigne, *hee ſett them on the* right wing: *and laſtly caſt his Phalange in to a Plaſium: and ordered his horſe* before. *In the Corneland, they* followed *(for feare of an Ambuſhe) In the Champian they marched on the*

b Leo cap. 4 §. 6
c Arrian lib. 1. 13 F & 14 D
d Arrian li. 2. 35
Curt. lib. 3. 63
e Arri. li 3. 59. F
f Diod. Sicul. lib. 19. 615 626.
g Diod. Sicul. lib. 19. 716.
h Xenop. Cyrop. lib. 7. 192. C. 80 175. C.
i Arrian lib. 1. 44 D. E.

right wing, *because on the left, the Phalange was secured by the River*; before *the Plæsium, that, being over-layde with the multitude of the enimye, they might haue a sure retreate to the foote.* [a] *The same Alexander, when hee was to fight the Battaile of Issos with Darius, as long as hee was in the streights, marshalled his horse after his foote. But in marching forward, comming to open ground, when he might giue full length to his Phalange, hee placed his horse on both the wings. But the reason of setting them behinde was in the streightnes of the place: and hee being incerteine how neere the enemye lay, was loathe to put them to hasard, before they had liberty of grounde to order themselues, and might haue assistance of the foote. For otherwise it was an ordinarie matter in marching (as it is the manner also at this day) to dispose the horse half behinde, and half before. I will content my self with one example. When* [b] *Agesilaus retourning out of Asia,* passed through Thessalie, the Thessalians, allies of the Thebans, followed him, and sought to endammage his armie to theire vttermost. Hee had before disposed his march into a Plæsium, with the horse half *in front*, and half *behinde*, nowe when the Thessalians ceased not to molest him, by falling vpon his reare, hee sent to the reare all the horse of the vantgarde, excepting those, that attended his person. Either party prepared them selues to fight. The Thessalians holding it not sure with Horse alone to incounter armed foote: Turning about their faces, began leasurely to retire, and the Lacedæmonians slowly to followe, Agesilaus, perceaving the errour of both, sent the best of his horse, that were about him, commanding them to signifie to the rest, that they together should goe, and charge the Thessalians with all speede, and giue noe respite to them, to turne their faces. The Thessalians contrary to their expectation being hottly charged, some fled, other some turned about towards the enimy, other some indevouring to turne, were surprised by theire enemies, that by that time were come vp to theire flancke. *Nowe for the reason of Ælians placing the Horse in the reare, I haue noe more to say, then, that from thence they might bee soone drawen to all places, front, flanke, or wheresoever the enemy is like to distresse vs. For it hath beene the forecast, of all generals to fashion their battails according to the figure the enemy hath before chosen. Examples are so plentifull, I neede not alleage many. Onely I will remember one latine story of placing horse in the reare. L. Lentulus, and L. Manlius Acidinus in Spaine being to fight with the Illergetes, and Ansetans, and other Spaniards, that had revolted from the Romans; in this very kinde of placing horse in the reare imitated, and gotte the advantage of, and defeated theire enemies.* [c] *Livy hath the story, and writes thus in effect:* The next day at the rising of the sonne the Spaniardes being all armed, and set in order, shewed theire battail, about a mile from the Roman campe. The Ansetans were in the middest the Illergetes held the right winge, other obscure people of Spaine the left: Betwixt the wings, and the middle parte, they left broade inter valls, to giue passage to theire horse: (when time should bee) to send them through to charge. The Romans Embattailed after theire wonted manner, Onely then imitated the enemy, in leaving open waies, for the horse betwixt the legions. Lentulus imagining that partye, and none other, should haue vse of theire horse, that first possessed these intervalls of the adverse battaile, commaunded Cornelius the Tribune to giue direction to the horsemen, presently to charge through, the foote on both sides came to blowes, and the fight was hard, when the Roman horsemen passing through the Spaces, and falling vpon the middest of theire enemies at once disordered the battaile of foote and shut vp the wayes against the Spanish horse, by which meanes, after noe long fight,

a Arrian lib. 2. 38. B. Curtius lib. 3. 64.

b Xenoph. hist. græc. lib. 4. 517. C.

c Livy Cecab. 3. lib. 9. 227. A. The like was done by M. Valerius the Dictator against the Hetruscans. Liv. decad. 8 lib. 19. 262. C. And by L. Papyrius Cur against the Sammit. Livius decad. 1 lib. 10. 283. C. And by Sylla against Archelaus Frodtin. li. 2. ca. 3

fight, the enemy was vtterly defeated. Where Livy saith the Romans embattailed *after theire wonted manner, his meaning is they ordered them selues in Maniples, or Battallions, as wee now terme them* (*for that was theire woont.*) But when hee addeth, they imitated the enemy in leaving open waies for the horse, betwixt the legions. *Wee must vnderstand that a* legion *was thus embattailed:* [a] *First they diuided theire legion in to thirty Maniples, ten of the* Hastati: *ten of the* Principes, *and ten of the* Triarij. *The ten maniples of the Hastati, they set first in an euen front, leaving soe much distance, or voide grounde betwixt every Maniple, as a Maniple it self tooke vp in standing. At a reasonable space behinde, were the Principes placed in as many maniples: but soe that theire maniples stoode directly behinde the voide spaces of the Hastati. And against the bodies of the hastati, they left likewise spaces in the Principes to the end, the Hastati being overlaid, might retire within those spaces: or else themselues might advance against the enemy, through the intervalls of the Hastati. Lastly at a larger distance behinde these were the Triarij set, and divided with spaces betwixt euery maniple, which spaces were great enough to receaue the Principes, in case they retired also. Now the Horse being ordered in the reare after the Triarij, if from thence, they had gon to charge the Enemies front, through the spaces of the Triarij, they must of necessity, haue fallen vpon the Maniples of the Principes whoe were set directly against the intervalls or spaces.*

[a] Livy dec. 1. lib. 8. 213. C.

To giue therefore free passage to theire horse, the Roman Generals removed the maniples of the Principes from theire ordinarie place, and bestowed them, in a right line, after the maniples of the Hastati, and made an open lane, (as it were) from the reare of theire battell to the front. So that nothing hindred the horse, but they might freely fly vp to, and fall vpon the enemies front. And yet I take not Ælians meaning, to be, that the Horse set in the reare, should during the time of the fight still remaine there. For soe would noe great service bee had of them. But hee placed them there the rather to avoyde confusion in ordering the foote. And that after theire embatteling, they might bee led from thence to any place, front or flanke, or whereseoever they might yeeld most vse. For in the fifteenth and twentith chapter, he would haue both light-armed, and horse soe placed, that they might answer all attempts of the enemy. And in his caution following, hee saith, if occasion require both horse and light-armed, may bee otherwise placed. *That they were vsually placed in the wings, I haue before shewed. The examples declare they were placed in the reare sometimes:*

Of placing in the front there are also examples. [b] *The Lacedæmonians at the battaile of Leuctra against the Thebans placed theire horse before their Phalange, and tried their fortune with them, and were beaten, before the foote ioyned:* [c] *The Persians at the River Granicus, esteeming theire Horse to bee theire chiefest strength, opposed them vpon the bancks against Alexander, that was to passe over, and embattailled their foote behinde the horse. And Alexander encountered them first with his Horse, before his foote could get over: One example more I will adde to shewe the reason, why Horse are sometimes placed before the front of the Phalange of foote.* [d] *Eumenes being to fight against Craterus and Neoptolemus, both greate generalls, that had served vnder Alexander in all his warrs, ordered the fight thus:* Becausse hee vnder-stood, that theire Army consisted of twenty thowsand foote, the most parte Macedonians renowmed for theire valour, and skill in fight (in whom they set theire greatest trust) and of more then two thowsand horse; and knewe his owne foote, albeit they were as many in number, yet all to bee ramasses of diuerse kinds of people, and that his owne horse were fiue thowsand, with exceeded the enimy both in number, and valor, hee determined to hasard the battaile vpon his horse, before the two Phalanges of foote should come together: Advancing therefore with his horse farre before his

[b] Xenoph. hist. græc. li 6. 596. A.

[c] Plutarch in vita Alexand. Arrian lib. 1. 14. F.

[d] Plutarch in vita Eumenis. Diod. Sicul. lib. 19. 644

his foote, hee tooke the right wing himselfe, and gaue the left to two strangers, to Pharnabarus a Persian the sonne of Artabazus, and to Phenix a Tenedian: Craterus stood in the right wing of his owne horse, and placed Neoptolemus on the left. And seeing the enemies horse comming forward, with greate fury charged them first, and fought brauely. But his horse failing vnder him, hee fell to grounde, and it being not knowne, whoe hee was by reason of the medly, and throng of those, that gaue backe, and fled, hee was trampled vnder foote, and ended his life after a strange manner. By his death the enemy tooke courage, and encompassing theire adversaries on all sides, made a great slaughter, and the right wing, after this manner, with might overpressed, and put to the worst, was faine to fly for succour to the Phalange of foote. In the left winge Neoptolemus stoode directly against Eumenes, and the mutuall sight of eche bredde a greate emulation betwixt the *generalls*, and a fervent desire to come to hands. And being easely knowne, both by theire horse, and other marks, they slewe one vpon another; and out of theire single fight made away to a consequent victorie. And first they assailed one another with swords, and after fell into an vnlooked for, and wonderfull Monomachy, for being transported with anger, and mutuall hatred, quitting the raines of theire bridles, with theire left hands they eache seazed, and tooke hold vpon the body of other, which hapening, and the horse continuing theire careare, and springing from vnder them, they both fell to the grounde, neither of them could wel arise by reason of the suddaine, & violent fall, and of the heavines of theire armor. Yet Eumenes got vp first, and prevented Neoptolemus, stricking him on the ham. The wounde was wide, and his strength of footing thereby failed, & soe lay as one, that had noe vse of his legge, being not able to raise himselfe because of the hurt: notwithstanding, courage overcoming the weaknes of his body, hee lift vp himselfe vpon his knees, and hurt his adversarie in the arme, and thighes, giving him three wounds. But none of the wounds were mortall, and they being yet warme, Eumenes with a second blowe hitting his necke, slewe Neoptolemus outright. Whilest these things were a doing the rest of the horse fell together. Many were slaine on either side: some therefore falling, other being wounded, at the first the daunger was equall. Afterward, when the death of Neoptolemus was openly knowne, and that the other wing was put to flight, euery one shifted for himselfe, & made towards the Phalange of foote, as to a strong wall of defence to saue himselfe. *This was the issue of the battaile. Whercin Eumenes, placing his horse before his foote, because hee held them his strength, and with the trieng the hazard of the day, shewed himself, both in councell, and action, a greate generall. And Craterus on the contrary side, albeit highly esteemed emongest the Macedonians, as one, that had with great sufficiency served Alexander in all his warres, yet failed in iudgment, in that hee chose rather with his horse to encounter the stronger parte of his enimies forces, then with his Macedonian Pholange (which Eumenes himself feared) to trie his fortune. For as it is a pointe of forecast to knowe a mans owne advantage, and vse it: Soe it is noe lesse iudgement, to knowe wherein the enimye is stronger, and avoyde yt. Eumenes did both; for hee vsed his owne horse, which were his strength, and brought to passe, that Craterus his Phalange did him noe good, in as much as they never came to fight. Craterus failed in both, in that hee neither brought his Phalange to fight, nor yet provided sufficientlie to encounter Eumenes horse; which exceeded his in valour, and number; so appeares both, that horse were placed before the front of the foote; and also the storie giues the reason, why they were placed there.*

of

Of the number of the armed foote, of the light-armed, and of the Horſe.

Chap. VIII.

NOw are wee to lay out, what number the *armed-foote*, the *light-armed*, and the *Horſe* ought to bee, and how particulerly ordered, and how vpon occaſion the *Battaile* may ſpeedely be tranſformed into divers ſhapes, & formes, and what diſcipline vſed for the motion of the ſeverall parts of it. Wee cannot with any probabilitie ſet downe a preciſe number of forces to be levyed. For as much as euery man is to proportion his levie according to the importance and qualitie of the warre in hand. This yet muſt not eſcape vs, that ſuch a number is to bee choſen, as will fitt [1] the divers ſhapes, and tranſmutations of our *Troopes*. As if in caſe wee were to double, or to multiply, and manifoldly enlarge the length of the *Phalange*, or els to leſſen, and drawe it vp into a narrower roome. For this cauſe choice is made of a number, that may be reparted into half continually, till you come to one. Hence is it, that moſt *Tactick* writers would haue [2] a *Phalange* to conſiſt of *ſixteen thouſand, three hundred, eightie, and foure armed foote*, and of [4] half ſo many *light-armed*, [5] and of half as many *Horſe*, as *light-armed*. For 16384. may bee reparted continually into half, till you come to *one*. Therefore for proofe, and Examples ſake this numbers is admitted. And where wee haue allotted ſixteen men to every *file*, the whole maſſe will ariſe to *one thouſand, twenty, and foure files*.

Notes.

THE Chapter before ſpake of the parts and dimenſion, of the Phalange, and of the place of the armed, the horſe, and light-armed. This treateth of the number that goeth to the Phalange. In choiſe of which number, Ælian ſaith conſideration is not ſoe much to bee had of multitude, as of fitnes for ſervice. For ſuch a number as cannot aptly bee diſpoſed of for fight, is rather meanes of confuſion, then of order without which noe fight can be mainteyned: Therefore ſuch a number is to bee choſen as will ſerue.

1 The diverſe ſhapes, and tranſmutations of our Battaile] *Euery motion in the battaile makes not a Tranſmutation, or diverſitie of ſhape. In* turning of faces *to the one hand or other there is noe other ſhape of the Phalange, then was at firſt: As a man turning his face any way, the ſame proportion of lineaments remaines that was in him before. Soe likewiſe* in countermarch *or* wheeling *after the* Countermarche, *or* wheling *is done, every ſouldier if he keep his right diſtance, and remaine in file and ranke, hath the place hee had before: And ſoe noe tranſfiguration of length or of depth followeth. The motion then, that Ælian meanes to make Tranſmutation, are Doublinges: For whether you enlarge the length, or depth, of your Phalange, you ſtraight induce another ſhape. A long fronted Phalange, and a Herſe differ much in forme. If you will make of the ordinarie Phalange a herſe, you are to double your files ſoe often, as your thinke conveniens for the length of your herſe. Then if from the Herſe, your would returne it to the firſt forme, you are not to ceaſe* doubling Ranks, *till you haue gained that forme: likewiſe if of your ordinarie Phalange, you would make a long fronted Phalange, your* rankes *are to bee* doubled, *and by continuing your* doublinge, *you may drawe out what length you will. And*

contrary

contrarywise, by due doubling your files againe, you come to the first forme: How much you double your Ranks, Soe much you take away from the depth of your Phalange; as on the other side, doubling of your files, diminisheth the length. For the purpose, your Phalange is sixteen deep, double your Ranks; the depth hath but eight men; double it once more, and it hath but foure. Soe is the Phalange consisting of foure ranks, & euery ranke, hath foure thousand, and ninty six men in it: But the length is foure times as much as it was. In like manner doubling your files (which in Ælians Phalange are a thousand, and twenty foure) the first doubling loseth fiue hundred, and twelue files and soe many remayne; the second seuen hundred, and sixty eight, and two hundred fifty six remaine; and soe many men haue you in a ranke. But where the Phalange was but sixteen deepe, nowe in the second doubling it is become sixty foure deep: If you please to reduce it to the first forme, two doublings of ranks will suffice. Heere wee must vnderstand that doubling ranks, is not to make twice soe many as they were before, but to giue twice so many men, to every ranke, as they had before by insertinge the euen ranks into the odde; as the second into the first, and the fourth into the third, and the sixt into the fiuth, and the eight into the seuenth, &c. The vse of doubling I will shewe in my notes vpon the twenty nine chapter of this booke. Ælian therefore would haue his Phalange, of such a number as may bee reparted continually into halfe, till you come to one; which number hee saith to bee sixteen thousand three hundred, and eighty foure. And yt ariseth out of the Multiplication of one by two soe still doubling the product, till you haue made vp the full number, of sixteen thousand, three hundred, and eighty foure. And as the Multiplication by two begetts this number, soe it being divided by two continually, it may bee reduced at last to one: which is the thing, that Ælian aymes at. For the numbers, that haue not equall diuision by half, leaue some supernumerary men in the Phalange: (which) in doubling will disorder both files, and Ranks: Every man acquainted with the lowe countrie militarie exercise at this day, knoweth, that when there is an vneven number of files, the odde file supernumerary brings a difference, and cannot bee doubled in the sort as the rest are: As in fiue, seuen, nine, eleuen, seuerall bodies of files. Two, six, eight, ten, may well bee doubled, and become two, three, foure, fiue files a piece: but the fifth, seuenth, ninth, eleventh, must bee severed from the rest of the doubled files; and serue to noe purpose, being not matcheable in depth with the rest after theire doubling. The same reason is of ranks: Now when Ælian saith, that this number in a Phalange may bee deuided by half and reduced at last to one, wee must with all vnderstand, that the file of the Phalange in such diuision, ought to be either of eight, or sixteen men a piece. For noe number vnder eight, except foure, or two (which fitte not the depth, of a Phalange) nor betwixt eight, and sixteen, is diuisible by half, till you come to one. Noe nor aboue sixteen, except it bee produced out of the duplications of sixteen. A file of 12. comes neareſt. And of that number was the file of Cyrus in Xenophon. Such a file notwithstanding by diuision of two staies at three, and can descend noe lower. Ten was the old file of the Gracians, and it was called[a] Decas. And albeit afterward vpon better consideracion they enlarged the number of the file to twelue, yet they reteined the name of Decas still. But ten receiveth but one diuision, and goeth downe ward noe further then fiue. The vneven numbers vnder sixteen cannot bee divided at all. Vnles by fraction. As thirteen, which if you will divide by halfe, the quotient will bee six, and there remaineth an odde man over: of which number, if all the files of the Phalange should bee, you should haue a thousand, two hundred, and sixty, which will receiue noe more, then two doublings without a fraction. If then the files be aboue sixteen, and vnder thirty two, you cannot divide them continually by half, but you must faile of the manner, that Ælian speaks of. As for the number of sixteen thousand, three hundred, and eighty foure, albeit of it self, it is diuisible by two till you come or discend

[a] Xenop. Cyrop. lib. 2. 43. B.

to

to 1, *yet we muſt not conſider it apart, as an abſtract by it ſelfe, but as it numbreth, and is applied to the* Phalange. *In which reſpect, it giueth a* 1024 *files of* 16 *deepe, which files will ſtill hold out the doubling, till you come to one file.*

3 A Phalange to conſiſt of 16384.] *Ælian (out of the moſt Tactick writers as he profeſſeth) will haue the* Phalange *of ſixteene thouſand, three hundred, eighty and foure men. I haue noted before that a* Phalange *may be more, or leſſe, than this number. But I take this to be the number of the Macedonian Phalange.* [a] Appian *ſeemes to teſtifie with me. thus he ſaith:* Antiochus whole army conſiſted of 70000 men. Of which the chiefeſt ſtrength was the *Phalange* of Macedonians, conteining 16000 men, ordered according to the forme, that *Philip* and *Alexander* had before vſed. He placed them in the middle, diuiding the 16000, into 10 equall parts, in euery of which parts was 50 men in front, and 32 in depth, and vpon the flanks of euery part 22. the ſhew of the *Phalange* was like a wall, of the Elephants like turretts: *hitherto Appian. I haue tranſlated* He Phalanx, He Macedonon *according to the word, the Phalange of the Macedonians, where the right meaning is, the Macedonian Phalange. For it conſiſted not of Macedonians, but was armed, and ordered, after the Macedonian manner. For how was it poſſible for Antiochus to wage, and haue in his ſeruice* 16000 *Macedonians, being neuer himſelfe King of Macedonia, and the King, that then was (namely* Philip *the ſonne of* Demetrius*) was his enemy, and in league with the Romans? Beſides* Appian *hath in expreſſe words:* the Phalange was armed, and ordered, according to the inſtitution of Philip and Alexander: *whoſe manner Antiochus mought well reteine, conſidering he was lineally deſcended from Seleucus, the ſucceſſor of Alexander in the kingdome of Aſiria: And Seleucus had beene in the ſeruice of Alexander in the whole conqueſt of Perſia.* [b] Liuy *ſaith alſo, they were armed after the Macedonian manner. Whereby a man may inferre, they were no Macedonians: Hee ſpeaking of the ſame battaile (which was the battell of Antiochus againſt L. Scipio) hath thus:* The Kings army was mingled of ſundry nations, and diuers with diſſimilitude of armes and aides. There were 16000 foote armed after the manner of the Macedonians. They were called *Phalangites.* This was the middle of the battell, and in front diuided into 10 parts, which parts were diſtinguiſhed by placing 2. Elephants in each intervall. The battell had 32 rancks in depth. It was the principall ſtrength of the Kings forces, and both with the other ſhew, and alſo with the Elephants, which were eminent amongſt the Armed only, brought with it great terror. *Liuy ſaith the* 16000 *were armed after the Macedonian manner, and were called* Phalangites; *Appian, that there were* 16000 *ordered, and diſtributed according to the ordinance of* Philip *and* Alexander. *Liuy, and Appian, both agree, that there was* 10 *parts, and euery part ſeuered with intervalls, and had* 32 *men in depth, which is the Macedonian file once doubled.* Liuy *ſpeaketh not of the number of the length of the Phalange.* Appian *ſaith plainely there were* 50 *in front, of euery of the* 10 *parts, which amounts to* 500: *for* 10 *times* 50 *makes* 500. *Now if you multiply the length of the Phalange which is* 500 *by the depth, which is* 32, *you haue the* 16000, *whereof* Liuy *and* Appian *ſpake. But yet reſteth a doubt, in the difference betwixt both theſe authors, and* Ælian. Liuy, *and* Appian, *both giuing but* 16000: *Ælian* 16384 *to the Macedonian Phalange. For* Liuy, *we are not much to inſiſt vpon him, who being a Roman (we may probably coniecture) was halfe a ſtranger, in the Art Tacticke of the Gracians, and that, which he wrote, he had from others; perhaps no better skilled in the ſame Art than himſelfe.* Appian *was a Gracian (for ſo thoſe of Alexandria in Ægipt accounted themſelues, after* Ptolomy *the firſt had eſtabliſhed that Crowne in his family) and as his hiſtorie ſheweth, well acquainted with the order the Gracians held in embatte-*

[a] Appian. in Syriacis. 107. B.

[b] Liv. Decad. 4. lib. 7. 141. A.

ling their armies, and therefore we may the better rely vpon his authoritie. Who albeit hee firſt affirmed the Phalange *was of the number of* 16000, *yet after in numbring the depth and length alone, he findeth* 16000: *and further expounding his owne meaning he ſheweth, there were more vpon the flanks of the ten parts, into which the* Phalange *was diuided. His words import: That* Antiochus *diuided his* Phalange *into* 10 *equall parts, giuing euery part in front* 50 *men, in depth* 32; *which being multiplied together, make vp the* 16000. *He addeth;* And in the flanke of euery part he ſet 22. *If the meaning be, he ſet* 22 *vpon each flanke of euery part, the parts being* 10, *and the flanks* 20, *the number will ariſe to* 440, *where* Ælian *alloweth no more than* 384. *But if* 22 *were added to one of the flanks of each diuiſion, which alſo being collectiuely taken are flanks in the plurall number, we ſhall come ſhort and finde no more than* 220. *Yet whether ſenſe of both you admit, it is plaine, that* Appian *attributeth more, than* 16 *thouſand, to that* Macedonian Phalange. *And it may be, there is an error in the number of the* 22, *and that it ought to be written* 32. *For if* Antiochus *had giuen* 32, *as he gaue* 22, *to one flanke of euery part, and ſet* 32 *vpon the vttermoſt flanks of euery winge to ſtrengthen them, of the* 12 *times* 32 *had ariſen the iuſt number of* Ælians Phalange; *which number is the fitteſt, for vſe, and for diuiſion of the* Phalange *in all doublings. The armed foote then, according to* Ælian, *ought to be,* 16384. *The light armed.*

4 Halfe ſo many] *The armed amongſt the* Græcians, *were accounted the ſtrength of the field, which was the cauſe their number was greateſt. For you ſhall not finde in their battailes for the moſt part, that the light armed amounted to halfe the number of the armed: The fact of* Cyrus *ſheweth what account he made of light armed:* [a] Xenophon *reporteth it thus:* He led with him the *Lydians*, thoſe whom he ſaw to take delight in Armes, horſe, and chariots, and willingly doe, what they were commanded, he gaue armes to, of thoſe whom he ſaw followed him againſt their wils, he gaue the horſes to the *Perſians*, that were his firſt companions in Armes. All that followed him vnarmed, he exerciſed to the *ſling*, becauſe he reckoned that weapon moſt ſeruile of all others. *How much you increaſe the number of the* light armed, *ſo much you diminiſh the number of the armed, and by conſequent ſo much weaken your field.* [b] *For the* light *cannot maintaine any ſtable fight, but in caſe of danger they are forced either to ſhew a faire paire of heeles, or elſe retire to the armed for ſuccor: Yet ſerue they for many vſes ioyned with the armed. And the proportiõ that* Ælian *ſetteth downe, namely to haue halfe as many of them, as there are armed, ſtandeth to good reaſon, & vſe. The* Romans *notwithſtanding, were more ſparing in their* light armed, *& allowed not aboue the* 4th *part of them, or litle more, to the armed.* The *Legion* conteined (ſaith [c] *Polybius*) 4200 footmen. Of theſe they choſe 600 *Triarians*, 1200 *haſtati*, 1200 *Principes*, (which come to 3000) and the reſt *Velites*, which were 1200. *And the Velites were the ſame in effect amongſt the* Romans, *that the* light armed *amongſt the* Græcians, *albeit their* arming *ſomewhat differed.* Ælian *before ſhewed, that the* Græcian light armed *had no manner of defenſiue armour, but offenſiue only, as bowes, darts, or ſtones.* [d] *Polybius* deſcribeth the Armes of the Velites to be a *Sword*, a *Parma*, (which is a ſmall Target,) and *darts*; the *ſword* a ſpaniſh ſword, the *Target* a litle round Target, a foote and a halfe (*for ſo* Caſaubon *correcteth* Tripedon) in breadth; the *darts* in the ſteale 3 foote long, and a finger thicke; and the head almoſt a foote long. *And* [e] Livy *mentioning the skirmiſhes, that fell out betwixt the horſemen of King* Philip *of* Macedonia, *and* Sulpitius *the* Roman Conſul, *compareth both th ir Armies together, telling that either party had their* light armed *ioyned to their horſe, and that comming to fight, the* Romans *had the better.* So (*ſaith he*) neither the Kings horſe, vnaccuſtomed to a ſtedfaſt fight, were able to match the Roman

a Xenoph. Cyrop. lib. 7. 188. B.

b Xenoph. Cyrop. lib. 6. 167. C.

c Polyb lib. 6. 468. B. C.

d Polyb. lib 6 468. D.

e Livy Decad. 4. lib. 1. pag 16. B.

Roman horſe, nor yet the foote skipping and leaping here and there, and almoſt halfe naked in their kinde of Armes, to be compared to the Roman *Veles*, hauing a Target, and a ſword, and being armed ſufficiently both to defend himſelfe, and aſſaile his enemy. *The number then of Ælians* light armed, *ought to be* 8192, *and theſe being ranged behinde the armed* 8 *deepe (ſo they are fitteſt for ſeruice) will make* 1024 *files, as many as the armed did.*

5 Halte as many horſe, as &c.] *The horſe are in number* 4096, *and proportioned to the foote (comprehending the* light armed) *as* 1. *to* 6. *The armed foot, and light armed together make* 24576: *the horſe* 4096. *And this was* [a] Alexanders *proportion, when he moued firſt againſt* Darius. *For he had about* 30000 *foote, and* 5000 *horſe, or not many more, as* Diodorus *ſaith.* [b] Iuſtin *giues him* 32000 *foote,* 4500 *horſe. Yet this number held not alwaies amongſt the* Macedonians *themſelues; I meane* Alexanders Captaines, *that poſſeſſed his kingdomes after his death. The reaſon may be, that in Ciuill warres they made their leuies, not as they would, but as they could.* [c] *In the battaile betwixt* Eumenes, *and* Craterus, (*I ſpake of that battell before*) Craterus *had* 20000 *foote, &* 2000 *horſe;* Eumenes *had* 20000 *foote, &* 5000 *horſe.* Craterus *the proportion of* 1. *to* 10; Eumenes *of* 1. *to* 4. [d] Antigonus *fighting againſt* Eumenes *in* Cappadocia, *had in his Army aboue* 10000 *foote, and* 2000 *horſe;* Eumenes *had as before.* Antigonus *horſe were to the foote, as* 1. *to* 5. [e] *The ſame* Antigonus *fighting againſt* Alcetas, *the brother of* Perdiccas, *had in his Army* 40000 *foote, and more than* 7000 *horſe; the proportion well nigh of* 1. *to* 6; Alcetas *had no more than* 16000 *foote, and* 900 *horſe, failing much of* Ælians *number.* [f] Antigonus *in his ſecond battell againſt* Eumenes, *had* 28000 *footmen, and* 800 *horſe, which is* 1. *to* 3. *and halfe;* Eumenes *had* 35000 *foote, and* 6000 *horſe, very neare* Ælians *proportion. Many other examples are to be read in* Diodorus. *But (as I ſaid) theſe are* Ramaſſes *proceeding not of choiſe, but of neceſſitie, which forced them to take ſuch, as came to hand; as it alwaies falleth out in ſoddaine leuies. And it ſeemeth the number of horſe (allowed to the foote by* Ælian) *was King* Philips *proportion; conſidering* Alexander *vſed it* [g] *after he receiued his armie from* Philip, *who by præmeditation, and fore-choice, had gathered it together with intent to inuade* Perſia. *And yet I finde* [h] *that* Philip *himſelfe, when he fought againſt the* Athenians *and* Beotians *at* Cheronea, *had more than* 30000 *foote, and* 2000 *horſe; which is* 1. *to* 15: *and in diuers other fights differed from* Ælian *in the number both of horſe, and foote. But the queſtion is not, what was done, but was beſt to be done. And the number that* Ælian *ſpeaketh of, ſuites his* Phalange *beſt. For* Philips *deuice being to caſt the horſe into wedges of* 64 *horſe a peece, and into* 64 *troupes; the greateſt ranke of ech wedge being* 15, *will in the reare equall the front of the* armed, *and of the* light armed; *not in number of files (for the files of the foote were* 1024. *and the greateſt ranke of the* horſe, *no more than* 960) *but in quantitie of place giuing to the* horſe, *ſtanding in their order of* 6 *foote betwixt man & man, the* 128 *cubits of* ſurpluſage *toward the difference of the horſes bodies, and toward the ſmall ſpaces that are to be left, betwixt Troope, and Troope.* [i] *The* Romans *allowed a farre leſſe rate of* horſe *to the* foote. *In a* Legion, *according to* Polybius *his account, there were of Citizens* 4200 *foote, and* 300 *horſe; of allies, and confederates* 4200 *foote, and* 600 *horſe. In a Conſular Army were* 2 *Legions of Citizens, and* 2 *of Allies, which came to* 16800, *a number not much differing from* Ælians Phalange *of foote. Of horſe* 600, *Allies* 1200; *in all making* 1800; *which commeth much ſhort of* 4096, (*the number* Ælian *alloweth to his* Phalange) *and holdeth proportion of about* 1. *to* 9. *The reaſon of this difference, may appeare in the fact of* [k] Eumenes; *who not much truſting his forces of foote againſt the* Macedonians (*accounted the beſt ſouldiers of*

[a] Diodor. Sicul. lib. 17. 571.
[b] Iuſtin. lib. 11. 639.
[c] Diod. Sicul. lib. 18. 644.
[d] Diod. Sicul. lib. 16. 649.
[e] Diod. Sicul. lib. 18. 651.
[f] Diod. Sicul. lib. 19. 685.
[g] Diod Sicul. lib. 16. 510.
[h] Diod. Sicul. lib. 16. 555.
[i] Polyb. lib. 6. 472. C.
[k] Diod. Sicul. lib. 18. 643.

of that age,) prepared himselfe a sufficient number of Horse with them to make a counterballance against the Macedonian *foote. And it hath beene the manner of Generalls of ancient time, if they trusted their Foote-forces, to make the lesse account of Horse: if they distrusted them; to encrease the number of their horse.*

The Romanes *trusting to their foote, required the lesser number of horse. The* Grecians *had the greater number of horse, both for the cause before recited, and further because they had continuall warre with* Barbarians, *that placed their confidence in horse; as the* Persians, *and the inhabitants of the lesser* Asia.

The names of the seuerall parts, and of the Commanders of the seuerall parts of the Phalange, and of the numbers vnder their commaunds.

Chap. IX.

THe files are ordered into bodies, which haue euery one a proper name. For two files they call [1] a *Dilochie* of *thirtie two men*, whose *Leader* is tearmed *Dilochita*. Foure files [2] a *Tetrarchy*, and the *Leader* thereof *Tetrarcha* hauing charge ouer 64. men. Two *Tetrarchies* [3] a *Taxis* of 128. men, and 8. files, and the *Leader* thereof hath the name of *Taxiarcha*. Two *Taxies* goe to [4] a *Syntagma* of 16. files, and 256. men; and the *Leader* thereof is called *Syntagmatarcha*. A *Syntagma* of 256. men is called of some a *Xenagy*, and the Commaunder *Xenagos*. In euery *Syntagma* of 256. are fiue [5] superordinary men, viz: [6] *An Ensigne*, [7] *a Reare-commaunder*, [8] *a Trompetter*, [9] *a Sergeant*, and *a* [10] *Crier*. This *Syntagma* seemeth to haue [11] *a Tetragonall* forme of 16. men in length, and 16. in depth. Two *Syntagmaes* make [12] *a Pentecostiarchy* of 512. men, and 32. files, the *Leader* whereof is named *Pentecostiarcha*. Two *Pentecostiarchies* make [13] *a Chiliarchy* of 1024. men, and 64 files: and the *Leader* is called *Chiliarcha*. Two *Chiliarchies* are called [14] *a Merarchy* of 2048. men, and 128. files, whose *Leader* is named *Merarcha*. Of some this part is called *a Telos*, and the *Leader* thereof *Telarcha*. Two *Telarchies* make [15] *a Phalangarchy* of 4096. men, and 256. files, the Commander whereof is called *Phalangarcha*. Yet some call it *a Strategy*, and the Commander *Strategos*. Two *Phalangarchies* [16] *a Diphalangarchy* of 8192. men, and 512. files. There are that tearme this part [17] *Meros*, and it is one of the wings. Two *Diphalangarchies* make a fourfold *Phalange* consisting of 1024. files, and 16384. men. So haue you in the whole *Phalange* of armed foote two wings, foure *Phalangarchies, eight Merarchies, sixteen Chiliarchies, thirty two Pentecostiarchies, sixtie foure Syntagmatarchies, one hundred twentie eight Taxiarchies, two hundred fiftie six Tetrarchies, fiue hundred twelue Dilochies, one thousand twenty foure files.*

Notes.

HEtherto haue beene shewed, *the manner of* arming, *and leuying of Souldiers*, filing, *and the* parts of files, ioyning of files, *and* ranking, *the* locall forme, *and* parts of a Phalange, *the* number *of the* armed, light-armed, *and* horse-men *requisite to a Phalange. This Chapter containes, as it were, the matter, of which a Phalange is compounded; that is the seuerall bodies Militarie, ordred, and ioyned together, to make vp the perfect forme of it. These bodies are many, and arise out of ioyning files by doubling still*

ſtill their number, and haue euery one a ſeuerall Commander. The leaſt is two files ioyned together, which is called a Dilochy; And becauſe there are in Phalange 1024. *files, there muſt alſo bee* 512. *Dilochies, which conſiſt of two files a peece. If you double this body of two files, and make thereof a body of foure files, it hath an other name, and is called a Tetrarchy, of which Tetrarchyes there are* 256. *in a Phalange. Double againe theſe* 4. *files, and make* 8. *the body is called* Taxis. *And theſe eight files, being doubled bring out the Syntagma of* 16. *files; which is a ſquare number of men,* 16. *in the front, and* 16. *in the flancke. And ſo proceeding ſtill in* 6. *doublings more, you come at laſt to the fourefold Phalange containing the number of* 16384. *men, and* 1024. *files. Now as in the Phalange there are* 10. *bodies out of theſe doublings, the Dilochy being the firſt, and the fourefold Phalange the laſt: So doth* Ælian, *appoint for euery body a Commander, who albeit they ſeuerally command, each his owne troupe, yet are they ſubordinately one vnder an other, the leſſer vnder the greater, till at laſt the ſouerainty of the command reſt in the Generall of the Army.* [a] *The Dilochites are directed by the Tetrarches, the Tetrarches by the Taxiarches, the Taxiarches by the Syntagmatarchs, the Syntagmatarches by the Pentecoſiarches, and they by the Chiliarchs, ouer whom are Merarches, and ouer the Merarches the Phalangarchs, and ouer them the Commanders of the winges, or Diphalangarches, and the ſouereigne of the Armie or Generall is the higheſt, and laſt. The number of theſe Commanders a man would think were to no great purpoſe being in all (the* 2. *Diphalangarchies therein comprized)* 1022, *beſides the file Leaders, which ſtanding in the heades of their files, amount but to two men more; that is to* 1024. *For ſo many (as I haue ſaid) are the files of the Phalange. But if the conueniency be obſerued, it will not ſeeme impertinent.*

[a] Xenoph. Cyroped. lib. 8. 203. A.

[b] *For all the Leaders being in front, (therefore are they called Leaders, becauſe they precede, and the reſt follow,) it makes both a gallant ſhew, and that rancke being as it were, the edge of our battaile, not only ſerues to hew a ſunder, and rent a pieces the forces of our enemie; But alſo ſtandeth as an aſſured bulwarke of defence before the reſt of the Armie, that followeth. And it is well noted by* [c] Leo, that the multitude of Commanders (in orderly diuiſions) both ſignifies, that there are many worthy and valiant men in the armie: And is a meanes to keep the Souldiers in greater obedience, and to giue vndoubted effect to all directions. *Of what qualitie and diſpoſition, thoſe Leaders ought to be, you may ſee in the* * *fourth Chapter of* Leos *Tactickes. Onely I will adde, that as they are higher in dignity, ſo ought they in vertue and valour exceede thoſe, that are vnder their command.*

[b] Xenoph. Cyrop. lib. 3. 85. C.

[c] Leo cap. 4. § 13.

* Leo cap. 4.

1 A Dilochy] *Conſiſts of two files; for ſo ſignifies the word* Dilochia: *and the Leader is called a* Dilochite. Dilochia.

2 A Tetrarchy] *Of foure files; and the Leader is called a* Tetrach, *one that hath the command of foure files. And here I muſt once more admoniſh, that in the words of diuers ſignification, we muſt not weigh, what is the proper ſignification, but how they are vſed in this Art, and* booke.

For the word Tetrarch ſignifieth ſometimes a King: as Heſychius *hath: and* [d] *Deiotarus in* Tully *is called a Tetrarch, and* [e] Herode *in the Goſpell; who both are commonly knowne for Kings.* Theſſaly *likewiſe was diuided into* 4. *Principalities,* Theſſaliotis, Pthiotis, Pelaſgiotis, *and* Aſtiotis; *whereof euery one was named a Tetrarchy. Onely the difference is, that a Tetrarch being a King, or a Gouernour, ſignifies him, that hath the gouernment of the fourth part of the land, (for a Tetrarchy is the gouernment of the fourth part) But a Tetrarchy in* Ælian *ſignifies* a body military *conſiſting of foure parts* (4. *files*) *and the Tetrarch commands not ouer one alone, but ouer all the* 4. *parts.*

[d] Cicero in orat. pro Deitaro.

[e] Luc.

3 A Taxis] *As the word Tetrarchy is diuerſly taken, ſo is Taxis likewiſe. For ſometimes it imports* Order *in a generall ſignification, as I noted before: Sometimes the*

f Polyb lib. 3. 225. B. & lib. 11. 639 E.
g Xenoph. de exped. lib. 4. 325 B ex Cyrop lib. 8. 202. C.
h Arrian lib. 2. 35 E
h Polyb. lib. 12. 666 B.
i Xenoph. Cyrop. lib. 2. 43 D.
k Polyen. lib. 3. § 10 ind. hicrat.

[f] order of a battaile: [g] sometimes a company of any kinde of Souldiers, foote, or horse: as Taxis Peltastarum, Taxis Equitum; Sometimes a single Phalange, as in [h] Arrian mention is made of Taxis Oœni, Taxis Perdiccæ, and Taxis Meleagri &c. who were Phalangarches, as the story sheweth. [i] Sometimes for all the armed, as Taxis Phalangitarum: Sometimes a rancke of men standing embattailed, as in Thucidides, who discribing the battell of the Lacedemonians, saith the front (which he calleth the first rancke teen proteen Taxin) consisted of 448. But in a more speciall signification it is taken for a band of Souldiers. And in that signification the number varieth. [i] In Xenophon, it comprehendeth a hundred men: What the number of the Athenian Taxis was, I finde not deliuered by any Writer. That they had Taxiarchs [k] Polyenus sheweth plainely. And if a man with leaue might geesse, I would imagine their Taxis consisted of 250 men: For I finde in the same place of Polyenus, that they had Chiliarchies, Pentecosiarchies, Taxies, and Lochagies. I haue before shewed, that Lochos in Xenophon is made sometimes of aboue 100. men. Out of which may be inferred with probability, that Taxis, being the next degree aboue the Lochagie, hath the double number, or more; The rather because a Chiliarchy hauing in it a 1000. the Pentecosiarchy must haue 500. and by likelihood the Taxis 250. as being the next office vnder the Pentecosiarchy. But whatsoeuer the Taxis of the Athenians, or of other people was, Ælian maketh his Taxis vp with 128 men, and 8. files; which is a double number to the Tetrarchy. With whom Suidas agreeth, giuing 2. Tetrarchies to a Taxis: and saith it consists of 128 men. The Commander of the Taxis is called a Taxiarch, as the Commander of the Tetrarchy is a Tetrarch. Here I am to note by the way, that the Interpreter of Xenophon translateth Taxiarcha, the Commander of a Cohort; where Taxis in the straighter signification cannot be taken for a Cohort because a Cohort differeth much in number, hauing in it at the least 500. and odde men, where the Taxis, when it is greatest hath no more then 128. And [l] Polybius saith plainely, that Spira is the Greeke word, that fully expresseth the Romane Cohort.

l Polyb. lib. 11. 641. C.

m Polybius calleth a Cohort Syntagma, lib. 11 641. C.
n Diod. Sicul lib. 13 391.

4 A Syntagma] The word commeth of Syntasso, or Syntatto, to place together; and a Syntagma is a body compounded of many parts artificially put together. [m] But it may be taken for any body in the armie. [n] Diodorus reports of Dionysius the elder That after he had diuided his whole Armie, (which had in it 30000) into three parts, he imployed two against the Carthaginian Campe in diuers manner: himselfe tooke the Syntagma, or third part, which consisted of mercenary Souldiers, and led against that quarter of the campe, which had the Engins. * Ælian also vseth the word diuerslie; For he calles the whole armie by the name of Syntagmata, in the plurall number, and sometimes Syntagma in the singular. And further giues the same name to a file; [o] Suidas likewise discribing the length of a Phalange, saith, it is the first rancke (Syntagma) of file Leaders, which stretcheth forth in a right line from winge to winge. Whereby appeareth that which the Logitians affirme, (which I touched before) that there are more things then names of things: And that fit names cannot be giuen to all. The names that haue beene giuen by antiquity, to expresse the seuerall bodies of the Phalange, are to be reteined by vs, as proper enough to signifie the thing they meant. Neither are we to vary from them, vnlesse we our selues can inuent better. The Syntagma that Ælian here mentioneth, is framed of two Taxies, that is of 16. files, & of 256 men. The Commander of it is named a Syntagmatarch. And where he addeth, it is called of some a Xenagy, we are to vnderstand that [p] Xenagos was he (amongst the Grecians) that had the command of a band of strangers, (as he that leuied strangers was called [q] Xenologos) and the band it selfe was called a Xenagy. Why the Syntagma should haue the appellation of Xenagy, I cannot diuine; vnlesse the reason were, because it was about the

* Cap. 31.

o Suidas in mêcos.

p Suidas in Xenagos & Iul. Poll. lib. 1. cap 10.
q Polyb. lib. 1. 33. B.

number

number, wherof ſtrangers made their companies, that ſerued amongſt the Græcians. *And I thinke, and ſhall till better information, that the body of the light armed called a* Xenagy *mentioned hereafter, had that name likewiſe for the ſame reaſon. Now of all the bodies in this Chapter mentioned, there is none that commeth ſo neere the companies vſed at this day, as doth the* Syntagma, *for (excepting that our numbers differre, and are in diuers places more, or leſſe) the offices of each are alike. You haue in the* Syntagma *a Lieutenant, or Reare Commander; ſo in our Companies. In the* Syntagma, *is an Enſigne, and an Enſigne-bearer; the like in our Companies. In a* Syntagma *is one Sergeant, our Companies haue more. The* Syntagma *had a trumpet, and our Companies for the moſt part haue two drummes. We onely want a Crier, which euery* Syntagma *amongſt the* Macedonians *had. What the vſe and place of all the Officers was, I will ſtraight diſcouer.*

5 Fiue ſuperordinarie men;] *Namely the* Enſigne *the* Reare-commander, *the* Trumpetter, *the* Sergeant, *and the* Crier *of whom we laſt ſpake. That which I tranſlated, ſuperordinary, is in Greeke* Ectactoi. [r] Suidas *giues the reaſon, why they were ſo called: becauſe ſaith he, they were not numbred as part of the battaile, that is ordered in files & rankes.* [r] *As* Xenophon *ſaith of* Miriarches, Chiliarches, *and* Taxiarches, *& other Commanders (whom* Cyrus *called to him) that they were not recounted amongſt the militarie numbers, and might depart from the Phalange without altering the forme thereof. In the files they could not be, becauſe they ſhould ſo increaſe the number in the files, and make one longer then an other, and hinder doublings, and other motions, beſides the deformity, they ſhould bring in, in making the battaile vneuen: And a file of themſelues they could not make. The like diſorder would they bring in the rankes, where they could not conueniently ſtand, vnleſſe ſome body filed with them, being much ſhort of a file of themſelues. Beſides their imployment is to ſtirre here and there apart, as they are commanded: where they of files, and rankes neuer moue ſingle, but iointly, as ſhall ſeem good to their Commander. And albeit theſe fiue bee remoued from the battaile, yet remaineth the battaile without them entire of it ſelfe, and in perfect forme, as though there were no neede of them, when notwithſtanding their vſe is otherwiſe ſo needfull that although the battaile* may be, *it cannot* well be *without them.*

r Suidas in Ectactos.

r Xenoph. Cyrop. lib. 3. 78. A.

An Enſigne] *Our vſe is to call the Enſigne-bearer an Enſigne for breuities ſake; As a Drummer, a Drumme, a Trumpetter, a Trumpet; and that not abſurdly. A diſtinction will eaſily appeare in common ſpeech, by the application of words of circumſtance to the one, or the other. The end why* enſignes *were diuiſed appeareth in* [t] Diodorus Siculus; *he giuing diuers reaſons, why the* Ægyptians *(whom he accounted the ancienteſt of men) were carried away with ſuperſtition of worſhipping Beaſts, after the manner of the Countrey, hath amongſt other words theſe in effect*: A ſecond cauſe the *Ægyptians* giue, becauſe of old time being in diuers conflicts thorough diſorder in their Armie, vanquiſhed by their borderers, they had recourſe to the inuention & bearing of Enſignes in their troupes. They ſay therefore, that preparing images of the beaſts, they now worſhippe, and faſtening them to the ends of long ſtaues, the Commanders cauſed them to be borne aloft; by meanes wherof euery man knew of what troupe he was. And ſeeing this good order auailed much to victorie, they conceiued, that the beaſts were the cauſe of their ſafety. In recompence whereof they ordered, that none of theſe beaſts ſhould be killed, but be honoured with religious care and worſhip. *Enſignes were then deuiſed for readines to direct ſouldiers in particular, whither to reſort in time of fight.* [u] Cæſars *practiſe agreeth hereto: he telling of his owne ſouldiers diſorder hath thus:* Whatſoeuer part they came into by chance, and to what Enſigne ſoeuer, there they ſtaied, leaſt in ſeeking their owne

t Diodor. Sicul. lib. 1. 54.

u Cæſar. de bell. gall. lib. 2.

owne they might happily loſe the time of fight. *And* [u]Vegetius *enlargeth the cauſe writing thus:* The ancient warriors perceiuing that in time of fight the order, and embattailing of an Armie was quickly brought in route, and confuſion, to auoide this inconuenience, diuided the Cohorts into Companies, and appointed an Enſigne of euery Company. So that in the Enſigne was written, of what Cohort and of what number in the Cohort the Companie was. Which the ſouldier ſeeing, or reading could not eſtray from their Companions, though the tumult were neuer ſo great. [x] Leo *alſo maketh this the vſe of the* Enſigne: Wee command alſo, *ſaith he*, that the heads of the Enſignes of euery Company or Band be of one colour, and that the ſilke of euery Turme, or Drunge, haue a colour by it ſelfe. And to the end that euery Companie may with eaſe know their owne Enſigne, other markes and tokens are to be added to the heads of the Enſignes, that according to Turmes, and Drunges, and Companies, they may be knowne. But in any caſe, let the Enſignes of euery *Turmarchy* be different one from an other, & cleare to be diſcerned, that the ſouldiers may know them euen at a farre diſtance. *His meaning, as I take it, is, that euery great body, or regiment ſhould beare in their* Enſignes *a ſeuerall colour, and that the Companies of that* body *ſhould likewiſe hold themſelues to the ſame colour in their* Enſignes: *So notwithſtanding that (as the vſe is at this day) the* Enſignes *of euery Company ſhould haue a ſeuerall marke to bee knowne by, beſides the colour in generall. For ſo both the Regiment may be quickly diſcerned, and one Company with facilitie be diſtinguiſhed from another. What the forme of the* Enſigne *was, we may out of the former place of* Diodorus *ſee: The* Ægyptians, *ſaith he*, counterfeating the ſhape of thoſe Beaſts, which they worſhippe, faſtened the Portract to the end of long ſtaues. [y] Xenophon *teſtifies the like of the* Standerd *of* Cyrus. Cyrus *(ſaith he)* commanded his army to caſt their eyes vpon the *Standard*, and to follow it with equall pace, and in order. The *Standard* was a golden Egle ſtretcht out vpon the end of a long ſtaffe. Which *Standard* is at this day the *Standard* of the Kings of *Perſia*. *The* Enſigne *was nothing elſe, but the figure of ſome beaſt aduanced high vpon the end of a long ſtaffe. As of an* Egle, *of a* Wolfe, *of a* Horſe, *and ſuch like; and ſometimes they added peeces of coloured ſilke faſtned vnder theſe images to make a greater difference betwixt the Enſignes. Whether our* Enſignes *at this day, made of many ells of Taffaty, or the ancient* Enſignes *of the* Græcians *(I may alſo adde of the* Romans, *for they obſerued the ſame forme) are the better for vſe, I will not now diſpute. I may notwithſtanding freely ſay, that the ſtronger reaſon weigheth for the* Ancient. *For beſides the authoritie of ſuch excellent wits, as they were, and ſo exquiſite in their inuentions, the reaſon of the lightnes is to be preferred: Beſides the winde hath no ſuch force ouer them, and they neither hinder the* Souldiers, *that ſtand next by entangling, nor by flapping in their faces, nor take away the ſight of ſuch things as are to be obſerued and regarded in the field. For the matter whereof the* Enſigne *was made,* [z] *ſee* Iuſtus Lipſius *in his Commentaries to* Polybius. *As for the armour of the* Enſigne-bearer *(eſpecially the* Enſigne-bearer *of the armed) I take it (for I haue no authoritie therein) that he had the ſame* defenſiue Armour, *that the Souldier which fought vnder the* Enſigne *had (excepting the Target) both to aſſure himſelfe from the flying weapons of the* light armed, *and from the pike and ſword of the armed, in caſe the battaile were entred and pierced as farre, as the* Enſigne. *For it was no reaſon, he ſhould carry a Target, leſt both his hands ſhould be bound, the right with the* Enſigne, *the left with the* Target; *and ſo he haue no vſe of either againſt the enemy. And in the left hand I would giue him a ſpeare, or Iauelin, (not a pike, which cannot be weilded with one hand) for his owne defence, and to offend the enemy. Which weapon, I haue read* Enſignes

u Veget. lib 2 cap. 13.

x Leo cap 6. §18 19. 20.

y Xenoph. Cyrop. lib 7. 172. D.

z Lipſius ad Polyb. lib. 4. Dialog. 5.

ſignes *of ancient time did beare. What the* Enſignes *place was, whether in front, or in the middeſt of the Battaile, I ſee it controverted.* [f] Patricius *abſolutely affirmeth, that the* Enſignes *were placed in the* middeſt of the front, *and had* 8 *files on the right, and* 8 *on the left, to the end they might be ſeene, and followed by all. That* Enſignes *were firſt inuented to be a marke of ſeuerall bodies military in an Army, I haue before ſhewed. But it followeth not thereof, that they were placed in the* front *in time of fight. For being in the middle, they no leſſe gaue notice, what the body was, than in the* front. *The reaſon of* following *is of leſſe force; Inaſmuch as the* Souldier *well knoweth whom to follow, though he had no* Enſigne *at all, the* Commander *alwaies with his motion giuing him direction, when to* aduance forward, *when to* turne his face *to the right, or left hand, when to* countermarch, *when to* double, *and when to vſe all other motions military. And the* Commanders *were therefore called* Leaders, *becauſe they went on before, and the* Souldiers *followed after. So that the* Enſigne, *in regard of* following, *neede not to be ſet in the* front. [g] *Yet in exerciſing the troupes, and in marches, I finde, that the* Enſigne *was in the* front, *together with the* Captaine, Crier, Trumpeter, *and* Guide. *But I take the reaſon to be, becauſe being in the middeſt, and hauing neither file, nor ranke with the reſt, they might happily bring a confuſion, and be a hinderance to the changes, and diuers figures of the Battaile. When the time of fight was, the* Enſigne *retired to his place, that is to the middeſt. For ſo* [h] Leo *interpreteth himſelfe in his precept of cloſing files: which muſt be done, ſaith he, not onely by File-leaders in front, Commanders of fiue, and Bringers-vp in the Reare, but in the middeſt alſo, where the* Enſigne *ſtandeth. And I rather agree to* Leo *herein, becauſe I ſee, it was the manner of the* Romans *alſo, to place their* Enſignes *in the middeſt of their* Maniples. [i] *From whence came the appellations of* Anteſignani, *Souldiers that ſtood before the Enſignes, and* Poſtſignani, *that ſtood behinde. Beſides the* Enſigne *being in the* front, *the* Enſigne-bearer *may ſoone get a clap, who falling, the* Enſigne *goeth to ground, and is in danger of looſing, which was the greateſt diſgrace among the* Romans, *that might befall. Laſtly,* [k] Ælian *himſelfe in plaine words placeth the Cornet of horſe farre from the* front. *For ſpeaking of the ordinarie Horſe-troupe, he ſaith it is to conſiſt of* 64 *horſe, the firſt ranke of* 15 *horſe, the* 2 *of* 13, *the* 3 *of* 11, *the* 4 *of* 9; *deſcending ſtill, and diminiſhing* 2 *horſe in euery ranke, till you come to one. He addeth;* he ſhall carry the Cornet, that ſtandeth in the ſecond ranke next the ranke-Commander on the left hand: *which* ranke *is the ſecond* ranke, *himſelfe declareth, making the ranke of* 15 *the firſt, the* 2 *the* 13; *which is the* 7th *from the* front, *and next the reare but one. If the* Cornet *haue no place in* front, *why ſhould the* Enſigne, *conſidering both ſerue to one vſe, and the reaſons of* ſeeing, and following *are equall to both? And albeit* [l] Suidas *place the* Enſigne, *the* Crier, *the* Trompet, *and* Sargeant, *before the Battaile, the* Lieutenant *in the reare, he is notwithſtanding to be vnderſtood, of the times of marching, or of exerciſe, which I noted before. For what ſhould that Rable of vnarmed (being* 4 *in euery* Syntagma, *and in the whole* Phalange 256.) *doe in the front in the time of fight, but onely peſter the choſen of the Armie: who therefore haue the front, that they may make ſpeedier way into the enemies battell?*

f Patric. Parall. part. 2. lib. 10. cap. 3.

g Leo cap. 7. §. 53. & cap. 14. §. 65.

h Leo cap. 7. §. 33.

i Lipſius ad Polyb. lib. 4. Dial. 3.

k poſtea c. 20.

l Suidas in Ectactos.

7 A Reare-commander] *Was the ſame that a* Leutenant *is with vs. He commandeth the Souldiers in the Reare, no leſſe then the* Syntagmatarch *in the front, and had his place in the Reare. What the duty of a* Reare-commander *was, I haue ſhewed out of* [m] Cyrus *words in* Xenophon. *And* [n] Ælian *afterwards ſetteth it downe moſt plainly. He was armed, as the reſt of the armed of the* Syntagma, *namely with Pike, and Target, and with ſuch other armes, as I haue deſcribed in my notes vpon the ſecond Chapter.*

m Xenoph. Cyrop. lib. 6. 167. E.

n poſtea cap. 14.

8 A Trumpet]

8 A Trumpet.] *The inuention of the* Trumpet *is attributed to* Tirrhenus Hercules *ſonne. But the different vſe of theſe officers is worth the noting out of* [a] Suidas: The Crier, *ſaith he*, ſerueth to deliuer directions by voice, the *Enſigne* by *ſignall*, when noiſe taketh away the hearing of the voice: the *Trumpet* by ſound, when thorough thicknes of duſt a *ſignall* cannot be diſcerned: The *Sargeant* to bring ſuch things, and diſpatch ſuch meſſages, as his *Syntagmatarch* commands. *So that theſe officers were held all neceſſary for a* Company, *the one ſupplying the defect of the other, and ſerning for vſe when the other failed. The* Trumpet *then was to be vſed according to* Suidas, *when neither the* Crier, *nor* Enſigne *could doe ſeruice. With the* Trumpet *was the* ſignall *giuen for the* Campe *to remoue, for the* Campe *to lodge. By the* Trumpet *the* Souldiers *were taught their time to fight, their time to retreate. The* Trumpet *ſet and diſcharged the watch. From the* Trumpet *came the meaſure of the* Marche, *and the quicknes, and ſlownes of* Pace. *In briefe, the* Trumpet *did all the offices, that the* Dromme *doth with vs at this day. Whether the* Trumpet *or* Dromme, *are of moſt vſe in the field, I may not now diſpute. Onely I will ſay that the* Græcians *and* Romans *the moſt expert and iudicious Souldiers, that euer were, held themſelues to the* Trumpet, *and neuer vſed the* Dromme. *The* Dromme *was firſt inuented by* Bacchus, *who, as* [b] Polyenus *reporteth, fighting againſt the* Indians, *in ſtead of* Trumpets, *gaue the* ſignall of Battaile *with* Cymballs *and* Drommes. *From him it came to the* Indians, *who vſed it altogether, as* [c] Curtius *noteth in the battell betwixt* King Alexander *the* Great, *and* Porus. *The* Dromme *of* Parthians *is deſcribed by* [d] Plutarch *in the life of* Craſſus; *and by* [e] Appian. [f] *And* Leo *ſaith, the* Saracens, *who inuaded* Chriſtendome, *and infected the* Turkes *with their ſuperſtition, ordered their fights by the* Dromme. *From this* Eaſterne Aſiaticall *people it was brought into* Europe; *and now the generall cuſtome is amongſt all* Europæan *Nations, that the* foote *haue* Drommes *in the field, the horſe* Trumpets. *And yet for the* Trumpet, *I cannot ſay, that all the* Græcians *held themſelues preciſely vnto it.* [g] Plutarch *much commendeth the* Lacedemonian *manner of ioyning with the enemy, and writeth it is in this ſort:* When the King hath offered the *Goate* (that was the Lacedemonian ſacrifice, when they were to giue battaile) hee ſtraight commands all the Army to crowne their heads, and the *Flutes* to ſound the meaſure of [h] *Caſtor*: And himſelfe withall beginneth the [i] *Pæan*; (the ſong they vſed when they were to charge) and aduanceth firſt againſt the enemy. So that it is a braue, and no leſſe fearefull thing to behold them pacing according to the meaſure of the *Flute*; neither diſſoluing their order, nor ſhewing any aſtoniſhment of minde, but mildely, and ioyfully approching the danger of conflict, diuiding out their Marche to the ſound of the inſtrument. For it is not likely, that men ſo demeaning themſelues, can be tranſported with feare, or choler. Nay rather they muſt needes haue a ſetled minde full of hope, and aſſurance, as if God were preſent on their ſide: *thus* Plutarch. *Out of whoſe words it is cleare, that the* Lacedemonians *vſed no* Trumpets *in fight, but* Flutes, *and made them their inſtruments to daunce, as it were, the meaſures of warre by For they vſed an eaſie,* [k] *and ſlow pace, framed* [l] *to the cadence of the ſound; which may well be reſembled to the ſolemne meaſure, in dancing.* [m] Athenæus *rehearſeth out of* Herodotus, *that the* Lydians *vſed the like. But he addeth; that the* Cretans *made choice of the* Harpe *for their inſtrument of warre; as though it had beene peculiar to that nation.* [n] Pauſanias *teſtifieth the like of the* Lacedemonians. [o] Polybius *goeth not ſo farre, but affirmeth onely that the* Cretans, *and* Lacedemonians *in ſtead of* Trumpets *brought in* Flutes, *and meaſures into the warre. And if it were ſo that the* Lacedemonians *vſed* Harpes, *it is like, they tooke them from the* Cretans. *For I finde*

in

a Suidas in Eſtaſtos.

b Polyen. lib. 1. in Baccho §. 1.

c Curtius lib. 8. 372.

d Plutarch. in Craſſo

e App. in Parthicis 143. C. D.

f Leo cap. 18. §. 113.

g Plutarch. in Lycurgo.

h *For this meaſure ſee* Iul. Pollux. lib 4. cap. 10. § 2.

i Pæan *is a hymne prober to* Apollo. Iul. Pollux. lib. 1. cap 1. §. 33.

k Thucyd. lib. 5. 393 A.

l Polyen. lib. 1. in Procle. §. 1.

m Athenæus dipnoſoph. lib. 12 517. A.

n Pauſan in Laconicis. 193.

o Polyb lib. 4 289. E.

in [p] Plutarch, *that* Lycurgus *brought many of his lawes from* Crete, *and had great familiarity with* Thales *the* Cretan, *whom he also sent to* Lacedemon, *to make an ouerture for the establishing of his lawes, that were then newly finished. Yet* [q] Diodorus Siculus *reporteth, that the* Lacedemonians *vsed also* Trumpets *in their Battailes. He writing of a fight that was betwixt the* Thebans, *and* Lacedemonians *vnder the leading of* Agesilaus, *vseth these words in effect*: There was a strong fight betwixt them a long time, and at first *Agesilaus* had the better; but afterward, when the *Thebans* issued out of the City at all hands, *Agesilaus* seeing the multitude, caused the *Trumpet* to sound a retreat. *The signe of retreat here, was giuen by* Trumpet, *and it seemeth the* Lacedemonians *had the vse both of* Trumpet, *and* Flute. [r] *Of the* Flute *in pacing toward the enemy to ioyne battaile; of the* Trumpet *in all other military* signalls, *such (I haue before noted it) as the rest of the* Græcians *gaue by* Trumpet. *The place of the* Trumpet *in the time of the Battaile was within the* Phalange *by the* Ensigne. [s] Thucydides *placeth the* Flutes *of the* Lacedemonians *within the battaile, where they can finde no roome, vnlesse they stand by the* Ensignes. *And albeit* [t] Polienus *saith, the* Flute *led the* Army, *and went before, yet that is to be vnderstood in the marche. For in case of a Marche, or exercise,* [u] Leo *also giueth the* Trumpet *place by the* Captaine *in* front. *When the fight commeth, he retireth himselfe to his place in the Battaile with the rest.*

p Plutarch in Lycurgo.

q Diod. Sicul. lib. 15. 475.

r Polyen. lib. 1. in Procle. § 6. 1. Pausan. in Laconicis 193.

s Thucyd. lib. 5. 393.

t Polyen. lib. 1. in Procle. § 1.

u Leo cap. 7. § 53.

9 A Sergeant.] *The word* Hyperetes *signifieth a* Minister, (*which is all one with the French word* Sergeant, *as appeareth by the interpretation of our Law it selfe, wherein the* Sergeants, *next degree to* Iustices, *are called* seruientes ad legem. *I reteyne therefore the name of* Sergeant, *because it is familiar amongst souldiers. And a* Sergeant *hath the same office in our Warre that* Hypenetes *had amongst the* Græcians. *What his duty and seruice should be, is declared out of* [x] Suidas. *There were of these officers, as well among the horse, as the foote, as appeareth in* [y] Xenophon. *The estimation and worth of their places is expressed by the same* Xenophon. [z] *Cyrus* held the Sergeants in warre, *saith he,* worthy of no lesse honour, than [a] messengers, and Embassadors in peace. He conceiued that they ought to be trusty, skilfull in matter of warre, vnderstanding, quicke, swift, industrious, and voide of feare; besides endued with all qualities requisite in the best sort of men; & that they were to accustome themselues to refuse no manner of seruice, but willingly vndergo whatsoeuer is laid vpon them by their Commanders. *These* Sergeants *attended their* Commanders *in Marches, and other times, saue onely when Battaile was to be ioyned, and alwaies expected his command. During the fight, they retired to some place, where they might bee ready at call; for (as I said before) they could haue no place in* front.

x Suidas in Ectactos.

y Xenophon. Cyrop. lib. 7. 191. A.

z Xenoph. Cyrop. lib. 2. 44. D.

a *See* Suidas *in the word* Kerux.

10 A Crier.] *Concerning the office of a* Crier, Suidas *hath taught vs, that he was to deliuer the* Commanders *pleasure by voice.* [b] Leo *calleth him* Mandator, *from the Latine word, because he signified to the souldiers,* Mandata, *the commandments of the* Captaine. *In exercise he stood at the head of the Troupe, taking from the* Commander *the words of direction, and making, as it were, proclamation of them to the Souldiers; and serued often, when neither* Trumpet, *nor* signall *might be giuen; he was otherwise also of great vse. For in all busines which required distinct signification of any sudden alteration in the Armie, the* Crier *had his part alone.* [c] Xenophon *telleth in the* Græcians *returne out of Persia,* that *Clearchus* their Generall led them not against the enemy, both because their courages began to fall, and also because they were all the day fasting, and it grew somewhat late. But yet hee turned not out of the way, lest he might seeme to flie; but holding on right forward, he came with the vantgard

b Leo cap. 4. § 16.

c Xenoph. de exped. Cyri lib. 2. 277. E.

vantgard, to the next Villages by sunne-set there quartered; The very timber of the houses of some of those Villages was broken downe, and carried away by those of the Kings armie. The first therefore lodged themselues reasonably, the last being be-nighted euery man tooke vp his lodging as it fell out, and made a great noise, calling one after an other, so that the enemie heard it. Whereby it came to passe, that the next of them fled out of their tents. This appeared the next day, for neither was there carriage-beast, nor Campe, nor smoake neere at hand to be seene. The King also was terrified as it should seeme, with the accesse of the Armie. Which he declared by the next daies worke. Yet in the processe of night a feare seased the *Græcians* themselues: and the tumult, and hurleburly was such, as is wont, when men are possessed with feare. *Clearchus* in this distresse commanded *Tolmides* the *Elean* (whom hee then had with him, the best *Crier* of those times) after silence, to make proclamation, that the Commanders signified generally, that whosoeuer could bring foorth the Author of this tumult should haue a [a] talent of siluer for his paines. After this proclamation made by the *Crier* the Souldiers perceiued, that their feare was vaine, and that the Commanders were in safety: *Hetherto* Xenophon. *By which narration may appeare, that the* Crier *performed that, which neither Trumpet nor other signall could doe, the terror rising in the night (which is the time of confusion and disorder) and neither could the Trumpet giue any certaine sound to remedy the perill, nor any other signall be discerned by reason of the darknesse; and this seruice was done by the* Crier *amongst his owne folke. His seruice against the enemie is declared in the fact of* [b] Cleocrytus *the* Athenian Crier *who after the fight, betwixt* Thrasybulus *and the* 30. *Tyrants (wherein* Critias *and* Hippomachus *were slaine) with a proclamation to the Citizens, reconciled them to* Thrasybulus, *and was cause that the Tyrants were deposed, and had their authoritie abrogated by the people. The like seruice was done by a* Crier *in the behalfe of the* Græcians *against the* Persians, *about the time of the battaile of* Platææ. *The storie is this:* [c] When the *Græcians* vnder the conduct of *Leotychides*, the *Lacedemonian*, and *Xanthippus* the *Athenian*, had gathered a fleete of 250. Gallies together to the end to deliuer the Ilanders, and the Cities of the Continent of *Asia* the lesse, out of the seruitude of the *Persians*, they sailed out of *Delos*. The *Persians* then remained at *Samos*. But hearing of the approch of the *Græcians*, they left *Samos*, and put ouer to *Mycale* a City of *Ionia*. And because they perceiued their shippes vnfit for fight, they drew them on land, and fortified the place, where they landed, with a wodden wall, and a deepe trench. Neuertheless they sent for foote forces, from *Sardes*, and other the next Cities, and assembled to the number of a 100000 men; And made prouision for all things necessarie for warre, the rather, because they suspected the *Ionians* would reuolt. *Leotychides* hauing put his fleete in order, sailed towards the *Barbarians*, that were in *Mycale*, and dispatched away before a shippe, wherein was a *Crier*, who had the shrillest voice in all the Armie. Him he commanded to saile vp close to the enemie, and to proclaime aloude, that the *Græcians* hauing ouercome the *Persians* at *Platææ*, were now come thither to deliuer and set free the *Græcian* Cities of *Asia*. This was done by *Leotychides* to the end to disseuer the *Asian Græcians* from the *Barbarians*, and to raise a tumult in the enemies Campe. Which also came to passe. *What seruice could bee of more importance, then to set a diuision betwixt the enemies? It was done by the voice of a* Crier. *More examples I could alledge, but these may suffice. The* Criers *place was alwaies to attend the Commander in the head of the Troupes, vnlesse in the time of fight; at which time his voice could not be heard but gaue place to the noise of Trumpets and clashing of armor.*

[a] About a 176 pounds starling Iul. Poll lib. 9. cap. 6. 430. 437.

[b] Xenoph. histor. Græc. lib. 2. 474.

[c] Diodor. Sic: lib. 11. 260.

11 A Tetragonall forme] *That is of foure equall ſides, or foure ſquare; But we muſt vnderſtand (which Ælian after teacheth) that there are two kinds of* Tetragonall, *or ſquare bodies military, one in* number, *the other in* figure. *In number, when the front, and flancke of the body haue either of them as many Souldiers, as other; as the* Syntagma *hath* 16. *in front, and* 16. *in flancke. In figure, when the number of the front is greater, then the number of the flancke, and yet front and flancke ſtretch out an equall* length of ground; *as in the* ſquares of horſe, *whereof* Ælian *ſpeaketh hereafter. This laſt* ſquare *is at this day called* a ſquare of ground, *becauſe the ſpace of ground, which conteineth the length of the front, ſtretcheth out iuſtly as far, as the ſpace of ground, which conteineth the depth of the flancke. It is cauſed by the difference of diſtance, which is betwixt the Souldiers in front, and betwixt the Souldiers in flancke. In front, being cloſed to fight, the diſtance betwixt Souldier, and Souldier, is but a cubite; that is a foote, and a halfe. The diſtance betwixt ſouldier, and ſouldier, in flancke is two cubits, or three foote, which proportion will giue no more, then halfe ſo many men in flancke, as in front, and yet maintaine the trueneſſe and euenneſſe of the ſides of the figure; that is the length of the line, which meaſureth the front, and flancke, ſhall be all one.* Ælian cap. 18.

12 A Pentecoſiarchie] *The word is a command of* 500, *and that was ſometimes the number. In the* Macedonian Phalange, *it comprehendeth a* 512 *men. The cauſe of difference is the difference betwixt the file of the* Macedonians, *and the file of the ancient* Græcians *(whereof I haue ſpoken before) the odde* 12 *men comming in by the fifth doubling of* 16. *And the number being ſo neere* 500, *though ſomewhat aboue, the name of* Pentecoſiarchie *is ſtill retcined, becauſe it was then in vſe, and no other more fit could be found.*

13 A Chiliarchie] *The command of* 1000 *men according to the name; Ælian giueth it a* 1024, *from the doubling of* 512. *The* Tribunes *of the* Roman *Legions are by the* Greeke *Hiſtorians tearmed* Chiliarchs; *yet is there a great difference; for the* Chiliarchs *haue no more command, then ouer their* Chiliarchy *conſiſting of* 1000 *men, and ſometimes of more, as here in* Ælian *of* 1024. *But euery* Tribune *had in his turne the command of the whole Legion. And againe there being* 12 Tribunes, *to euery Legion (which at firſt had in it* 3000, *afterward* 4000, *then* [a] 5000, *and in the time of* [b] Vegetius 6000 *men) how ſhould a* Tribune *be called a* Chiliarch *and be a Leader of a thouſand, there being in the legion but* 6000 *men at the moſt, and yet* 12 Tribunes; *ſo that euery one could not haue, aboue* 500 *for his command; and in* Polybius *time, (the* legion *being but* 4200) *not aboue* 300 *and odde. But the* Roman *manner of warre and ordering of troupes, differed much from the* Græcians; *and the* Græcians *in tearming a* Tribune *a* Chiliarch, *tooke the next word, and moſt ſignificant amongeſt them to expreſſe the charge of a* Tribune. *Our* Coronells, *for their command, of a Regiment come neerer to the* Græcian Chiliarchs; *yet ours differ in that they haue* Companies *in their owne Regiments, which the* Græcian Chiliarchs had not; *and where* [d] Q. Curtius *ſaith, that the* Chiliarchy *was firſt inſtituted at* Babylon *by* Alexander, *as a reward for ſeruice, it ſeemeth to be otherwiſe. For as I finde this in no other Author, ſo finde I, that* Chiliarchies *were long before* Alexanders *time.* [e] Xenophon *reporteth, that* Cyrus *to* gaine encouragement to his ſouldiers to be valiant, promiſed to the Taxiarchs *to make them* Chiliarchs, *to the* Lochagi *to make them* Taxiarchs, *to the* Dechatchs *to make them* Lochagi, *to the* Pempadarchs *to make them* Decarchs; [f] *And that* Cyrus *made* Chryſanthas *a* Chiliarch *of horſe in regard of his worth, and forwardneſſe in ſeruice. And afterward he calleth* [g] Phranuchus, *and* Aſiadatas, Chiliarchs *of horſe, and* Artabaſus *and* Artagerſas Chiliarchs *of foote:* [h] Polyenus *witneſſeth that in* Iphicrates *his time the* Athenians *had* Chiliarchs, *and* Pentecoſiarchs, *ſo that the inſtitution*

a Plutarch. in Romulo.
b Saluſt. in Iugurtha.
c Veget. lib. 2. cap 2.
d Quint. Curt. lib. 5. 166.
e Xenoph. Cyro. lib. 2. 43.
f Xenoph. Cyrop. lib. 4. 88 B.
g Xenoph. Cyrop. lib. 6. 168. C. D.
h Polyen. lib. 3. in Iphicrate § 10.

of Chiliarchs could not be referred to Alexanders being at Babylon, considering it was
a Arrian. lib. 3. 64. C. in vse before; And [a] Arrian reporting the same story, saith not, that Alexander first brought vp Chiliarchies there, but that he ordeined two Lochi in euery horse troupe (where to that day there had beene none) and two Lochagi to command them. Indeed
b Diod. Sicul. lib. 18. 653. [b] Diodorus Siculus, writes thus concerning a Chiliarch. Antipater, saith he, lying vpon his death-bed declared Polyperchon Protector of the Kings (being the eldest of those, that had serued Alexander in his warres, and much honoured of the Macedonians) and his owne sonne Cassander the Chiliarch, and second man in authority. The place and institution of the Chiliarch first grew to name and honor vnder the Persian Kings. So writes Diodorus of this Chiliarchy which Antipater bestowed vpon his sonne Cassander. Which notwithstanding seemes much to differ from the common Chiliarchy of the Phalange, whereof Curtius speaks. For Diodorus saith, he was next to Polyperchon in authority. Where in the Phalange there were many Commanders, namely, the Merarchs, the Phalangarchs &c. aboue the Chiliarchs. Adde that he saith, the institution of this Chiliarch came from the Persian Kings, when the Chiliarchs of the Phalange had their beginning from the Græcians, and were ordinarie in Phalanges, as I haue shewed. Lastly where Diodorus reporteth, that it had the increase and aduancement of honour from the Persian Kings, he sheweth plainely, it was not Alexanders inuention. And the same Diodorus speaking of the death of Ochus King of Persia telleth, that he was poisoned by Bagoas his Chiliarch in the time of the reigne of Philip, Alexanders father. This Chiliarch then I take to be the same, that the Generall of an armie is with vs. And I can hardly be perswaded, that Antipater wouldbequeath a lesse place to his sonne Cassander.

14 A Merarchy] The command of a part or halfe; for a Phalangarchy consisteth of two Merarchies. So that a Merarchy is halfe the Phalangarchy, and conteineth, 2048 men. This part is also called Telos, of which I haue spoken in my notes to the seuenth
c Thucyd. lib. 1. 33. Chapter. And yet the word Telos is not alone vsed in bodies of foote. For [c] Thucydides speaking of the fight by sea betwixt the Corcyræans, and Corinthians, telleth, that the Corcyræans gaue the right wing to ten Athenian shippes, and hauing of their owne a 100 and 10 shippes, diuided them into three Tele, euery of which was commanded by one of their Generalls: so that Telos there signifieth not a certaine number of ships, but a part of their fleet diuided into 3: & the Comanders of the Corcyræans are cal'd Strategoi.

15 A Phalangarchie] The command of a single Phalange. Of this kinde were
d Arrian. lib. 1. 14. E. & 35. E. & 60. A. the [d] Phalanges in Alexanders armie (as I take it) which were led by Cænos, by Perdiccas, by Craterus, by Amyntas, by Ptolomy, by Meleager, and other, as Arrian hath; Before Philip and Alexander gathered those forces together, wherewith Persia was subdued, the armies were of smaller number amongst the Græcians. Neither was it in many Cities might to raise 4096 men; which go to the Phalangarchy of Ælian: If any did, they might well call it an armie (Strategia, and the Commander Strategos) and the name of Strategos, or Generall was vsually giuen to him, that commanded in chiefe ouer an armie (though small) sent out by any Citie to warre. So then, as the Generall was called Strategos, a Phalangarchy might also be called Strategia. I haue before noted, that the sections of the Phalange are limited, and laid out by the Phalangarchies. And where there are 3 sections in a Phalange, the middle section is in the midst of the 4 Phalangarchies, 2 Phalangarchies lying on the one side, and 2 on the other. The 2 other sections are one betwixt the 2 Phalangarchies of the right wing, the other betwixt the two Phalangarchies of the left wing, for betwixt euery Phalangarchie was a space or section.

16 A Diphalangarchie] The command of two Phalangarchies; this was one of the wings. Ælian giueth it no Commander ordinary, neither doe I remember, that I haue

haue read Diphalangarchs *of Diphalangarchia, as* Phalangarchs *of* Phalangarchia; Tetrarchs *of* Tetrarchia. *Yet was there one, alwaies that commanded the winge, appointed to that place extraordinarily; So* [a] Philip, *at the battaile of* Cheronæa *(where he ouerthrew the power of the* Athenians, *and* Thebans, *and their Allies) tooke the one wing to himselfe, and gaue the command of the other to* Alexander *his sonne being then but young. And* [b] Alexander *at* Granicus *commanded himselfe the right wing, and appointed* Parmenio *to the left. So in the battailes against* Darius *at* [c] Issos *in* Cilicia, *and at* [d] Gaugamela *in* Syria.

a Diod. Sicul. lib. 16. 155.

b Arrian. lib. 1. 14. D.

c Arrian. lib. 2. 35. E.

d Arrian lib. 3. 60. B.

17 Meros] Meros *is a part by diuision, comming of the verbe,* meiro *to diuide. And as before,* Ametarchie, *was halfe a* Phalangarchie, *so here* Meros *is halfe the fourfold* Phalange. *Each then signifieth halfe, but to distinguish them, the one is called a* Merarchie, *that is a Commande of halfe, the other* Meros, *that is halfe: A distinction sufficient to know the one from the other. Two of these* Meros *make the* Phalange *conteining* 16384 *men. And these are the bodies militarie, which* Ælian *in this Chapter describeth, and which were in vse amongst the* Macedonians. *The other* Græcians *vsed other bodies in their armies. The* [e] Lacedemonians *diuided their whole city, into sixe bodies, horse and foote; euery one of which was called* Mora, *or* Moira. *Their Generall was one of their Kings, for they had alwaies two. Euery* Moira, *had a* Polemarch (*not much differing from our Coronells*) *foure* Lochagie, *eight* Pentecosteres, *and sixteene* Enemotarchs. *What the number of the* Moira *was, is vncertaine, by reason of the secrecie the* Lacedemonians *vsed in their gouernment, as* [f] Thucydides *saith.* Plutarch [g] *reporteth, that* Ephorus *the historian, giueth* 500 *men to the* Moira, Calisthenes 700. Polybius *and others* 900. [h] Diodorus Siculus, *agreeth with* Ephorus, *and alloweth but* 500 *to the* Moira. *And* [i] Xenophon *numbreth the* Moira *of the* Lacedemonians, *which* Iphicrates, *defeated hard by* Corinth, *to haue been about* 600 *men.* [k] *See the* scholiastes, *of* Thucydides, *for the exact number of these bodies. The* [l] Athenians *had their* Chiliarchs, Pentecosiarchs, Taxiarchs, *and* Lochagie, *as I haue said before. And with them were the* Lochagi *last, where with the* Lacedemonians *they were next the* Polemarchs, *but the number of the* Lochos *was not alike, as I haue likewise shewed before.* Cyrus *in* [m] Xenophon *hath these orders militarie,* Myriarchs *Commanders of ten thousand,* Chiliarchs *of a thousand,* Taxiarchs *of a hundred,* Lochagi *of twentie foure,* Decadarchs, *called sometime* Dodecadarchs *of* 12, Pempedarchs *of sixe, which are also called* Hexadarchs. [n] Vrbicius *differeth not much from* Ælian, *saue onely in the* number *of the* file, *and the* Officers *of the* file. *For where* Ælian *hath sixteene to a file,* Vrbicius *hath but ten: and* Vrbicius *alloweth but two* Commanders *to the file, the* File-leader, *and the* Bringer-vp Ælian *foure; the foure* Enomotarchs. *For the number of the Officers, in the* Phalange *they agree. And yet the names are not all one.* Ælian *beginneth with a* Dilochite *commanding two files, thirtie two men,* Vrbicius *with the* Lochagos, *who likewise commandeth two files of his, and fiue men more, namely* 25 *men. The next in* Ælian *is a* Tetrarch *ouer sixtie-foure men, in* Vrbicius *a* Pentecontarch *ouer fiftie men.* Vrbicius *hath next a* Taxiarch, *a* Syntagmatarch, *a* Pentecosiarch, *a* Chiliarch, *a* Merarch, *a* Phalangarch: *And so hath* Ælian. *The next in* Ælian *is a* Diphalangarch, *Commander of* 8192 *men;* Vrbicius *termeth him a* Myriarch *that is the Leader of ten thousand men. The* Tetraphalangarchy *is last in both. But* Vrbicius *assigneth no more, then* 16 *thousand to his* Phalange, Ælian 16 *thousand* 384. Iulius Pollux *thus diuideth his bodids, a* Myriarchie, *a* Chiliarchie, *a* Taxiarchie, *a* Hecatontarchie, *and a* Lochagie. *What a proportion* Leo *makes, is to be seene in the fourth Chapter of his* Tacticks. *Because, he hath a mixture of the* Roman *and* Greeke *Orders, I remit the Reader to the booke.*

e Xenoph. de rep. Lacedem. 686. A.

f Thucyd. lib. 39 C.

g Plutarch. in Pelopida.

h Diod. Sicul. lib. 15. 473.

i Xenoph. hist. Græc. lib. 4. 528. C.

k Scholiast. in Thucyd. lib. 5. 392.

l Polyen. lib. 3. in Iphicrat. § 10

m Xenophon Cyroped. lib. 2. 43. A.

n Etymologic: magn: in voce Stratos.

So then *Ælian* hath in his *Phalange* of armed (beſides the two *Diphalangarchs*) 1020. Officers.

Dilochites	512.
Tetrarchs	256.
Taxiarchs	128.
Syntagmatarchs	64.
Pentecoſiarchs	32.
Chiliarchs	16.
Merarchs	8.
Phalangarchs	4.
	1029.

I haue ſet downe the figures of all the bodies deſcribed by Ælian *as farre, as the* Phalangarchy. *The reſt would haue beene troubleſome to inſert as requiring more paper, then would ſtand with any reaſonable proportion; neither are they greatly needfull. For two* Phalangarchies *ioyned in an euen front, and in a conuenient diſtance, will figure out a* Diphalange; *foure in an euen front with a like diſtance will make the fourefold* Phalange. *So that thereby the forme of it will appeare.*

The precedence, and dignitie of place in the offices of the Phalange.

Chap. X.

1 THe beſt of the *Phalange* Commanders is placed on the right wing, the ſecond on the left wing, the third in valour in the right hand next the ſecond *Phalange* toward the middle ſection. The fourth on the left hand next the firſt *Phalange* toward the middle ſection likewiſe. So the firſt and fourth *Phalange* haue Commanders of the firſt, and fourth worth: The ſecond and third *Phalange* haue Commanders of the ſecond and third worth. Now wee will ſhew by demonſtration, that the firſt, and fourth worth, and valor, are equall to the ſecond, and third; So that the Commanders in each wing are of valor alike.

2 The Leaders alſo of the ſeuerall *Merarchies* are thus diſpoſed. The firſt hath his place in the head of the firſt *Phalange* on the left hand: The ſecond on the right hand of the ſecond *Phalange*. The third on the left hand of the third *Phalange*: The fourth on the right hand of the fourth *Phalange*. Alſo the Leaders of files in euery *Tetrarchy* are ſo placed, that the Leader of the firſt file hath preheminence in valor and place; the Leader of the fourth file ſtandeth next him: Then the Leader of the third file, and the Leader of the ſecond file laſt. For then are *Dilochies* of equall valor when the firſt *Dilochie* hath the firſt, and fourth Leaders, the ſecond *Dilochy* the ſecond, and the third Leaders in valor and reputation. For it appeareth in the *Mathematicks*, that, when there are *Analogies*, or anſwerable proportions of foure *magnitudes* propounded, that, which ariſeth of the firſt, and fourth, will counteruaile that, which ariſeth of the ſecond, and third magnitude. And becauſe there are foure *Tetrarchies* in euery *Syntagma*, wee may giue the Leaders of the *Tetrarchies* place according to the ſame proportion, as to place the *Tetrarch* of the firſt *Tetrarchy* on the right hand, giuing him the firſt place of worth; on his left hand the *Tetrarch* of the fourth *Tetrarchy* in the fourth place of worth. Then againe next him the *Tetrarch* of the third *Tetrarchy* in the third place of worth, and on his left

left hand the *Tetrarch* of the ſecond *Tetrarchy* in the ſecond place of worth.
In like manner are the greater commands alſo to be proportioned.

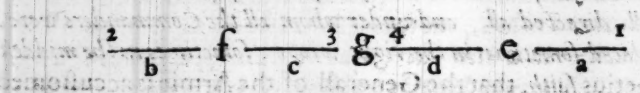
Notes.

THe former Chapter was of the Officers and of the bodies of the Phalange ; *this is of the place of euery one, according to his worth. And firſt wee are to note, that all the* [a] *Commanders were placed in front of thoſe, that they commanded ; to the end they might direct, and lead them as occaſion ſhould require. For* [b] Xenophon *ſaith of* Cyrus *army*, the *Decadarchs*, or file Leaders, had care of the files, the *Lochagie* of he *Decadarchs*, the *Taxiarches* of the *Lochagie*, the *Chiliarchs* of the *Taxiarchs*, the *Myriarchs* of the *Chiliarchs* : *So in the* Phalange *of* Ælian *the file Leader had the command of his file, the* Dilochites *of the file Leaders, the* Tetrarchs *of the* Dilochites, *the* Taxiarchs *of the* Tetrarchs, *and ſo the reſt, till you come to the Generall, who cared for all, directed all, and vnder whom all the Commanders were. The Generall hath beene placed ſometimes in the right winge, ſometimes in the middeſt of the* Phalange. [c] Vegetius *ſaith*, that the Generall of the Armie is accuſtomed to be in the right winge betwixt the horſe, and the foote. *Hee addeth*, this is the place, which gouerneth the whole battaile, from whence the ſalying out is moſt direct, and free. Therefore he ſtandeth betwixt both, that hee might both gouerne horſe, and foote with counſell, and with authority exhort them to fight. [d] Cyrus *in his battaile againſt* Creſus, *took his place in the right wing, betwixt the right hand point of the battaile, and of the horſe, that were ranged in the wing* ; Alexander *the great, in his battailes tooke the ſame place* ; [e] Timoleon *in his fight againſt the* Carthaginians *placed himſelfe in the middeſt of the battaile.* [f] Diodorus Siculus, *ſaith, that, it is the manner of the* Scythians, *that the King ſhould ſtand in the middeſt of the* Phalange. *The like doth* [g] Arrian *affirme of the* Perſians, *and ſaith, that* Darius *had that place.* [h] Leo *alſo giueth the middeſt of the battaile to the Generall. And there placeth the battaile ouer which he would haue him to command.*

a Xenoph. Cyrop. lib. 3. 85. C.
b Xenoph. Cyro. lib. 8. 203. A.
c Vegetius lib. 3. cap. 18.
d Xenoph. Cyrop. lib. 7. 176. B.
e Plutarch. in Timol.
f Diod. Sicul: lib. 20. 743.
g Arrian. lib. 2. 36. C.
h Leo cap. 4. § 65. & 67. & cap. 12. § 68.

1 The beſt of the Phalangarchs] *This ordering of the* Phalangarchs *the beſt on the right hand wing, the ſecond on the left, the third next him in the left wing on his right hand toward the middle ſection: The fourth in the right wing on the left hand of the firſt toward the middle ſection thus,* $\frac{2\ 3}{4\ 1}$ *commeth out of a Geometricall proportion, which proportion giueth law to the ordering of the reſt of the Commanders. The rule is this* : 4. Magnitudes which equally exceede the one the other being compared together that which ariſeth of the firſt, and fourth, is equall to that, which ariſeth of the ſecond, and third. *As* 2. 8. 14. 20. *each exceedeth the other, 6. The addition of* 2. *to* 20. *begetteth an equall number to* 8, *and* 14. *added together. So is it in all other numbers, that haue the ſame equalitie of exceſſe one aboue an other. Out of this rule of proportion,* Ælian *deriueth the giuing equalitie of ſtrength in the Leaders to euery bodie in the* Phalange. For Leaders and Commanders are (or ought at leaſt to bee) choſen by worth, and valour : and the preferments of the feild haue beene held the due reward of vertue. *Say then the* Phalangarchs *are preferred to their places according to their worth, and that the firſt* Phalangarch *is moſt worthy, the ſecond next him, the third next, the fourth leaſt deſeruing of the foure. If you ſhould place them, as their worth is in a rancke ſucceſſiuely one after an other, the beſt before the firſt* Phalangarchie *in the right wing, the ſecond before the next* Phalangarchie *in the ſame wing, and leaue the other two* Phalangarch's *to command the left wing, the diſproportion would be great ; the third and fourth not being able to match the worth of the firſt, and ſecond.*

But if you place the best Phalangarch *before the first* Phalangarchie *on the right wing, the second before the second* Phalangarchie *of the left wing, the third* Phalangarch *next him before the third* Phalangarchie *on the left wing, toward the middle Section; the fourth before the fourth* Phalangarchie *of the right wing toward the same Section, the valours of the Commanders, will be equall in both winges. For as in the number* 1.2.3.4. *one and* 4. *make* 5, *as many, as is made by ioyning* 2 *and* 3 *together; so the worth of the fourth* Phalangarch *ioyned to the worth of the first will arise as high in true valuation, as the worths of the second and third ioyned together. And where the* Phalangarchie *on the left corner of the left wing is called the second, and the next* Phalangarchie *standing in the same wing the third; it is to be understood that it is second in* dignitie, *not in succession of* number; *for the fourth* Phalangarchie *in* dignitie *standeth in place and number next the first; and the second* Phalangarchie *hath the last place of the whole* Phalange. *Their places then are after this manner according to* Ælian.



For the understanding whereof, you are to note, that

a *signifieth the first* Phalangarchie.
b *the second* Phalangarchie.
c *the third* Phalangarchie.
d *the fourth* Phalangarchie.
e *the Section of the right winge.*
f *the Section of the left winge.*
g *the middle Section.*
1 *the place of the first* Phalangarch.
2 *the place of the second* Phalangarch.
3 *the place of the third* Phalangarch.
4 *the place of the fourth* Phalangarch.

2 The Leaders of the Merarchies] *As the* Phalangarchs *so are all the other Commanders of the seuerall bodies placed by foure, and the same obseruation to be had, of the dignities of the place, that was in the* Phalangarchs: *and these* 4 Merarchies *(for* Ælian *speaketh of no more than* 4,*) must stand thus.*

P	*M*	*M*	*P*	*P*	*M*	*M*	*P*
2	2	3	3	4	4	1	1

P, standeth for Phalangarchs.
M, for Merarchs.

Robortellus *confesseth he findeth these* Merarchs *so placed in a written booke, and it is the true placing. The figures, he setteth downe out of his owne wit (as he termeth it) carry with them no sauour of* Ælians *proportion.* Patricius *likewise seemeth to haue mistaken this proportion in the figures he hath set downe, of which not one is right. I will referre the Reader to their bookes, admonishing him onely of the mistaking. But* Ælian *placeth here but* 4 Merarchs; *what order shall be for the other foure? I haue alwaies thought* Ælian *defective in this place, neither could I hitherto finde any man, that hath brought light to cleare the doubt.* Patricius *that purposely discourseth of this place of*

Ælian

Ælian, *speaketh of bestowing* 4 Merarchs *onely, as though the rest were to be throwne away from the* Phalange. Robortellus *seeking to bestow all* 8, *bestoweth them indeed, but not according to* Ælians *proportion, which notwithstanding he would seeme to follow. His figure is this.*

	P.	M.	M.	M.	M.	P.	P.	M.	M.	M.	M.	P.
	1.	8.	4.	3.	6.	3.	4.	5.	2.	1.	7.	2.
The right wing												*The left wing.*

The Middle.

The proportion is his, as I said, and not Ælians. *For* Ælian *placed the first* Merarch *in the right wing; he placeth him in the left;* Ælian *the second in the second* Phalangarchie, *he in the fourth;* Ælian *the third in the left wing, he in the right;* Ælian, *the fourth in the fourth* Phalangarchie, *he in the first. The rest are so tumbled together, as though any thing elsse had beene sought for, rather than proportion. I take not upon mee to over-rule any doubt; but if amongst the rest I enterpose mine opinion, I hope, I shall not incurre iust blame. Thus then: seeing* Ælians *meaning is by eveneſſe and worth of number of both wings to finde out the worth of the* Commanders *of both, if I so distribute them, that the number of the one side shall counterballance the number of the other, I cannot much stray from* Ælians *meaning. The figure following will doe it.*

	P.	M.	M.	M.	M.	P.	P.	M.	M.	M.	M.	P.
	1.	5.	1.	4.	8.	4.	3.	7.	3.	2.	6.	2.
The right wing												*The left wing.*

The Middle.

In this figure I haue obserued precisely the place, that Ælian *gaue to the* 4 Merarchs. *The first standeth on the left hand of the first* Phalangarch; *the second on the right hand of the second* Phalangarch; *the third on the left hand of the third* Phalangarch; *the* 4th *on the right hand of the* 4th Phalangarch. *The rest I haue added, and diuided according the placing of the first: So that the number that ariseth of the addition of both wings, is alike, and the proportion held. In all the rest of the bodies, where there is a Command ouer* 4, *the keeping of the proportion hath no difficulty. So euery* Phalangarch *commandeth ouer* 4 Chiliarchs; *euery* Merarch *ouer* 4 Pentecosiarchs; *euery* Chiliarch *ouer* 4 Syntagmatarchs; *euery* Pentecosiarch *ouer* 4 Taxiarchs; *euery* Syntagmatarch *ouer* 4 Tetrarchs; *euery* Taxiarch *ouer* 4 Dilochites; *euery* Tretarch *ouer* 4 *files*; *In all which the* Commander, *which hath the right, hath the first place, he that hath the point of the left hand, the second place; he that standeth on the right hand next to him, the third place; the last place is his, who standeth next to the Commander of the right point on the left hand. And for the place of the* Phalangarchs, *and of* 4 *of the* Merarchs, *and the* file-leaders, *and of the* Tetrarchs, *they are laid out by* Ælian. *The rest appeare by these, and are to be squared by the same rule of proportion, as* Ælian *admonished.*

The whole wing.	
The right w.	The left w.
1	3
5	7
1	3
4	2
8	6
4	2
23	23

The Merarchs alone.	
5	7
1	3
4	2
8	6
18	18

The

The distances to be obserued betweene Souldier and Souldier in opening and shutting the Phalange.

Chap. XI.

WE are now to speake of *distances* both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaile. The *distances* vary in three sorts. For first they are placed in thinner distance for some speciall causes. And a Souldier so placed taketh vp [1] 4 cubits. But in [2] *Densation* or *closing* he taketh vp 2 cubits. [3] In *Constipation* or *shutting*, one cubit.

Densation then, or *closing* is, when we draw wide distances close together, and by *side-men*, and *followers* (that is both in *length* and *depth*) gather vp the bodie of the *Phalange*: so notwithstanding that the souldier yet hath libertie to moue, and turne about.

Constipation, or *shutting* is when the *Phalange* by *side-men* gathereth it selfe yet closer together, then in *Densation*; so that by reason of the neareneſſe there is left no *Declination*, or turning of faces either to the right, or left hand.

The vse of *Closing* is, when the *Generall* leadeth the *Phalange* against the enemy. Of *Shutting* when he would haue it stand fast (and as it were *locked vp*, and *ferred*) to receiue the charge of the enemy.

Seeing then there are 1024 *File-leaders* in the front of the *Phalange*, it is plaine that [4] in their ordinary array they take vp in length 4096 *Cubits* [5] (that is ten furlongs, and ninetie six cubits) In *Closing* fiue furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and fower and twenty cubits.

Notes.

After Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. *For as a man, let him be neuer so well proportioned, and strong, if he pace disorderly, and either set too great strides, or reele here, and there, or so mince, and tread out his steps, as if his leggs were bound together, groweth hereby deformed, and not onely loseth his comelineſſe, but his actiuitie withall, and possibility to performe any thing by strength: So is it of an Armie, that hath either too great distances, or is thronged vp, or pestred too close together.* [a] *Too much thronging bindeth, as it were, the souldiers hands, and taketh away the vse of his weapons, as on the other side* [b] *falling one loose from another, and standing or mouing too farre asunder, maketh the Battaile weake, and disiointed, and subiect to the enemies entry, and easie to be broken. The meane betwixt both was brought in by King* Philip, *King of* Macedonia, *who first constituted, and raised the* Macedonian Phalange, *and inuented the distances of opening and closing the same; imitating the* [c] serring *of Targets (called* Synaspismos) *practised by the old* Heroes *at* Troy. *Out of his discipline sprung the distances mentioned here by* Ælian: *which are of three sorts; The first are large distances of*

1 Foure Cubits] *Which amount to six foote. For a* Cubit *conteineth a foote and a halfe. This* [d] *distance was vsed in marching, or else in solemne pompes and shewes. And the souldier hauing a pike of* [e] 14 *Cubits or* 21 *long, whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should haue a reasonable large distance, both in file and ranke,* [f] *to the end, that in turning this way, or that way,*

a Cæsar. de bel. gall. lib. 2.
b Plutarch. in Philopœmene.
c Diodor. Sic: lib. 16. 511.
d Polyb. lib. 12 664. C. Leo cap. 17. § 61.
e Polyb. lib. 17 764. A.
f Leo cap. 7. § 54.

way, or that way, or mouing out of his place (for no man in his marche, can alwaies hold his ranke) he offended not his next neighbours therewith. This distance our exercise at this day calleth open order. *The next distance is of*

Two Cubits] *Or three foote. The name of it in Greeke is* Pycnosis, *that is* thickning. *In* Leo *it is called* Sphinxis, *(knitting together) in our moderne exercise* Order. *And it is, when from the distance of 6 foote, we draw our* Phalange *both by file, and ranke, so close, that the souldiers stand but 3 foote one from an other euery way. This distance is vsed, when the Army approcheth neare to the enemy (and onely commeth not to charge) that it may be ready to shut, and locke it selfe for the charge, which is performed in the last distance of*

One Cubit] *A foote and a halfe. This is called* Synaspismos, *ioyning Target to Target. For, as I before shewed, the pikemen of the* Macedonians *vsed also Targets with their pikes, and in charging the enemy closed so neare in front, that their owne Targets touched one another. This kind of fight*[g] *the* Ægiptians *vsed in* Xenophon (*which he calleth* locking together of Targets) *and by meanes therof had the advantage against the Persians. The Parthian horse likewise comming to charge* Crassus *with their staues*: [h] After they perceiued the depth of the locking of Targets, and the setledneſſe, and stedfastnes of the *Roman Phalange*, they retired, and durst not come to hands with them. *And*[i] Diodorus Siculus *writes that* Alexander *besieging the City of Halicarnassus, there was in the City, and in seruice of* Darius *one* Ephialtes *an* Athenian, *a man of great valour, and strength of body*; He by the permission of Memnon Generall of Darius Armie, determined to make a saly. And taking to him 2000 mercenarie souldiers, all chosen men, and giuing brands flaming with fire to one halfe, and reseruing the rest for fight, he opened the gates, and fell out, throwing fire vpon the engines of battery, which soone caught a mighty flame; And marshalling the rest into a thicke and deepe *Phalange*, himselfe led on, and was the first that fell on the Macedonians cõming to aide, and to quench the fire. *Alexander* aduertised hereof speeded to the medley; & ordered first the Macedonians in front, after them other choice men, for seconds; and in the third place men of extraordinarie account for their prowesse, himselfe leading them on sustained the enemy, which seemed vnresistible, and sent others to slake, and put out the fire, and to preserue the Engines. The fight was hot, and albeit the Macedonians found meanes to quench the fire, yet had *Ephialtes* the better in the fight; who both himselfe killed many with his owne hands, and the towers from the walls furnished with many Catapelts annoyed greeuously the Macedonians. In so much that some falling in the place, other-some forsaking their ground by reason of the number of Engine Darts that fell thicke amongst them, *Alexander* himselfe was reduced to extremitie. Here the old souldiers of the Macedonians, although otherwise freed from such seruice in regard of their age, hauing of a long time followed the warres with King *Philip*, and gained many a battaile, were by this occasion tolled out to succour; and as they excelled the yonger sort in greatnes of spirit, and military experience, so meeting with the run-a-waies, they bitterly reuiled, and taunted them for their cowardice; Then * *ferring* themselues close, and ioyning their Targets together, they represſed, and held the enemy short, who now seemed to haue the victory in his hands. Finally killing *Ephialtes*, and many other, they droue the rest into the City. *A memorable seruice of the vse of Targets, and of the* Synaspisme *of the Macedonians, which was not vsed, but when they either gaue vpon, or receiued the charge of the enemy. And the Targets so knit together serued for a wall (as it were) to the whole* Phalange, *and by them the souldier was*

g Xenoph. Cyrop. lib. 7. 178. A.

It is called by Thucydides, *Synelisis*, Thucyd. lib. 5. 393. B.

h Appian. in Parthicis. 144. A. 164. D. C.

i Diod. Sicul. lib. 17. 575.

* Synaspisantes

was defended from the missiue weapons of the enemie, and his body couered euen from the peirsing of the sword. Synaspismos *then, or shutting, is that distance in the* Phalange, *which bringeth the souldiers Target to touch one an other, and is limited by* Ælian *to a cubite (that is a foote and a halfe) betwixt side-men, and side-men in the front. What distance the followers should haue,* Ælian *setteth not here down in plaine words; but implies, that they should hold their* 3 *foote still, in that he saith the* Phalange *in* constipation *gathereth the side-men closer, then in densation, but speaketh nothing of followers.* [a] Polybius *teacheth it more plainely; who giues them three foote distance from the Leader, both according to the* Macedonian *and* Roman *discipline, and that for the vse of their armes: with whom* Ælian *also agreeth* [b] *afterward. In what manner the Targetiers made their closings, and how their Targets were cast from the backe, where they hung, to the left shoulder, I haue before noted in the second Chapter, and therefore thinke it needlesse here to repeate. Now for the ground, that a* Phalange *taketh vp in each of these orders,* Ælian *sheweth it in the words following, allowing the* Phalange.

a Polyb. lib. 17. 764. A.

b Ælian. c. 14.

4 In [c] ordinary aray foure thousand cubits] *The* Phalange *in open order, saith* Ælian, *takes vp* 4096 *cubits of ground. This is to be vnderstood in front, or length; for in depth it hath no more, then* 64 *cubits; euery souldier (which are in number,* 16 *in file) possessing* 4 *cubites of ground in his open order; A cubit is the part of the arme, which reacheth from the elbow to the middle fingers end, and is as much, as a foote and a halfe. In front then, there being* 1024 *File-leaders, we most alott to each of them foure cubits, of ground; to the thousand* 4000 *cubits, and to the odde twentie foure* 96 *cubits. For foure times twentie foure makes* 96. *which together comes to* 4096 *cubits, and to six thousand one hundred fortie foure foote.*

c See Polyb. lib. 12. 664. C. Leo cap. 17. §91.

5 Ten furlongs and ninty six cubits] *Where this space is squared out by tenne furlongs, wee must vnderstand, that a furlong conteines* [d] *foure hundred cubits, and* 4096 *being diuided by* 400 *the quotient is* 10: $\frac{96}{400}$ *that is ten furlongs and* 96 *cubits, as* Ælian *saith. Which measure of ground the* Phalange *of Armed taketh in open Order. Of these furlongs* [e] *seuen and a halfe go to a mile, by which account the front of the* Phalange *of armed in open order taketh vp one mile, a quarter, and* 346 *cubits, measuring it by feete it amounts to* 6130. *In closing (which is named Order, and is the next* distance) *because the souldier is allowed but* 2 *cubits, that is halfe so much, as in open Order, the dimension will not exceede fiue furlongs,* 48 *cubits; that is* 2048 *cubits in all, which amounts to halfe a mile, halfe a quarter, and* 173 *cubits, in feete,* 3072. *In shutting* 2 *furlongs and a halfe, and* 24 *cubits; that is a quarter of a mile and* 274. *cubits.*

d Suidas in Plethro.

e Suidas ibid. & Leo cap. 17. §89.

The arming of the Phalange.

Chap. XII.

THe *Phalange* is to be armed with *Target* and *Pyke*. The best *Taget* is the *Macedonian target* made [1] of brasse, and [2] somewhat hollow, and hauing [3] eight handfulls in *Diameter*. The *Pyke* ought to be [4] no shorter then 8 cubits; and the longest no longer, then a man may well vse and wield in handling.

Notes.

IN *the second Chapter of this booke was handled the diuersitie of armes, vsed in the* Phalange. *This setteth forth the choice, that is to be made for matter and fashion, and what*

what sise is best of pike and target. For the other armor of the armed (whereof I spake, in my notes to the second Chapter) is (no question) to be fitted to the body of him, that shall beare them. He giueth then to the armed a target, and a pike, the target the Macedonian target, the matter whereof was first of brasse. I haue shewed, that the Macedonian target was of brasse, and that they were called by reason of the bearing such targets Chalcaipides Brazen-targets. I am induced to thinke, that, as Philip borowed many other things in warre from the Lacedemonians, so he borowed this kinde of target from them. For they by the ordinance of Lycurgus, were inioyned to haue no other matter in their target then brasse. [a] Xenophon giues a reason why they were made of brasse. For Lycurgus was of opinion, saith he, that such a Target was most fit for warre, because it is soone brought to shine, and it gathereth not rust easily, two great commodities in armes. For albeit the chiefest considerations be sureneſse, and strength, yet is not the beauty to be neglected, which shining doth principally set out. [b] Besides that it dazeleth the eye of the enemie, and strikes an amazednesse into his minde. [c] Xenophon much admireth Agesilaus, that he so armed, and clothed his armie, that they seemed to be nothing, but brasse, and nothing, but scarlet. The brasse he speaketh of, were the brazen targets of his souldiers, which couered the most part of the body, and were chiefely the obiect of the eye, without that, that any other weapon was at that time of Brasse. Therefore, as I said, I am of opinion that the brazen Target came from the Spartans to the Macedonians. The Brazen-targets Ælian would haue

a Xenophon de rep. Laced. 686. A.

b Plutarch. in Crasso.

c Xenoph. in Agesilao. 659. B.

2 Somewhat hollow] If they should beare streight out without any bowing, besides that they were vneasie, they would lie kicking out from the body, and not couer it much. The arme, or shoulder, that is inserted into the Target, is bowing. And the target somewhat bowing fits it for ease, and slopeth more toward the body to couer it, and is more pliable to be carried. But the hollownesse ought not to be much. He would haue it also

3 Eight hand-fulls in Diameter] The Diameter in a circle is a right line, which is drawne from one side of the circumference to the other passing thorough the Center, or middle point of the circle, diuiding the circle in two equall parts. Here the Diameter of the target is taken for the exact bredth of the target, which ought to be, according to the Macedonian manner, eight handfulls, or two foote, that is 32 fingers. For foure handfulls go to a foote, and foure fingers to a handfull. [d] Leo giues it three Spithams, that is 36 fingers, if he meane the great [e] Spithame, which is of twelue fingers. And the lesse comprehending a handfull he cannot meane. For so should the bredth of the target be no more, but three handfulls, a bredth insufficient to couer any mans body. Whether of them is the better will appeare in triall. The Diameter that serues to couer the bodie from the vpper part of the necke to the middle part of the thigh, is enough in these round targets. That, which is more, is rather troublesome, then fit for vse. And I am of Iphicrates iudgement in targets, that performing the couering of the bodie, they should be as light, as may bee, least the shoulder be ouer-laden with vnnecessarie weight. In which regard I preferre the Target of Ælian, before that of Leo; Ælians reaching vp to the height of the necke from the middle of the thigh; Leos carying a handfull more in bredth, which in the circumference groweth to a good proportion of weight and greatnesse.

d Leo cap. 6. § 38.

e Iul. Pollux lib. 2. cap. 4. § 32. calleth it a spanne.

4 No shorter than 8 Cubits] That is 12 foote. Short pikes against long haue a great disadvantage. With the long pike a man is able to strike, and kill his enemy, before himselfe can be touched, or come in danger of a shorter, the pike keeping the enemy out so farre, as the length is. The experience of the battaile of [f] Sorano, sheweth it; where Vitellozzo Vitelli discomfited the Almaines onely with the aduantage of pikes an arme longer than theirs. Against long pikes, this policie was vsed by Cleonymus the Lacedemonian King, as [g] Polienus tells. Cleonymus besieging Ædessa, and hauing ouer-

f Patricius Parel. part. secun: lib. 3. cap. 8.

g Polyen. lib. 2. in Cleonym. § 2.

throwne

throwne the wall of the City, the pikemen of the City ſalied out, whoſe pikes were each 16 cubits in length. *Cleonymus* cloſed his *Phalange* in depth, and commanded the file-leaders to lay away their pikes; and when the pikemen of the enemy came to charge, to ſeaze vpon their pikes with both hands, and hold them faſt, and the followers to paſſe thorough by the file-leaders ſides, and maintaine the fight. The file-leaders laid hold on the pikes, and the enemy ſtroue to recouer them out of their hands. In the meane time, the followers paſſing thorough the ranke of file-leaders to the front, ſlew the enemies pikemen, and got the victorie. *This was* Cleonymus *deuice againſt long pikes, which notwithſtanding derogates nothing from the length of pikes more, than from ſhortnes. For the ſame policie might haue prevailed as well againſt ſhort pikes, as long, each, aſſoone as the enemies haue ſeized vpon them, growing to be of no vſe. But that the longer pike is to be preferred before the ſhorter, I haue ſhewed before by reaſon: and the reformation of armes made by* Iphicrates *amongſt the* Athenians, *and by* Philopomen *amongſt the* Achaians, *will be warrant enough ſo to hold. In the* length *notwithſtanding ought to be a reaſonable conſideration, that it exceede not the meaſure of his ſtrength, that ſhall beare the* pike.

The worth that the File-leaders, and next followers ſhould be of

Chap. XIII.

THE *File-leaders* (as the Commanders of files of the *Phalange*) are to be the choice and flower of the Army, and to excell the reſt as well in ſtature, as in experience and martiall skill. For this *Ranke* knitteth and bindeth in the *Phalange*, and of all other yeeldeth greateſt vſe. For, as a ſword taking to the edge as a weight, and ſway, the ſwelling yron towards the backe exhibiteth thereby more violence in piercing, ſo in a *Phalange* the *Ranke* of *File-leaders* is the edge it ſelfe, and the multitude of after-commers is the ſwelling, and ſway, and increaſe of weight.

Conſideration muſt be had likewiſe of thoſe that follow in the ſecond *Ranke*. For their *Pikes* reach ioyntly ouer the *front*, and being next in place they are alwaies ready for vſe. And the *File-leader* falling, or being wounded, the next *follower* ſtepping to the *front* in his place, holdeth together, and preſerueth the tenor of that *Ranke* vnbroken.

Furthermore, we are to order the third and the reſt of the *Rankes* according to reaſon, and as the valour of our ſouldiers ſhall require.

This Chapter ſheweth how the Souldiers are to be ordered in euery File: *whereof, becauſe I haue before ſpoken ſufficiently in my Notes to the fifth Chapter; and the words of this Chapter carry no difficultie, or obſcuritie with them, I will forbeare to treat any further.*

Chap. XIIII.

Of the ſtrength of the Macedonian Phalange, and length of the Souldiers Pikes.

Chap. XIIII.

THE [1] *Macedonian Phalange* hath of enemies beene thought vnreſiſtible, by reaſon of [2] the manner of embattailing. For the Souldier with his Armes ſtandeth in cloſe order, or ſhutting, when he is ready for fight, [3] occupying two *Cubits* of ground. And the length of his *Pike* is ſixteene *Cubits* according to the firſt inſtitution, but in truth it ought to be foureteene *Cubits*; whereof the [4] ſpace betwixt the hands in charging taketh vp two *Cubits*, the other *twelue* lye out from the *front* of the Battaile. Thoſe in the ſecond Ranke, that ſtand next to the Leaders (looſing foure *Cubits* in the *Phalange*) haue their Pikes reaching ouer the firſt Ranke ten Cubits. Thoſe of the third Ranke eight Cubits, of the fourth Ranke ſix cubits, of the fift 4 cubits, of the ſixt 2 Cubits. [5] The *Pikes* of the other behind cannot attaine to the firſt Ranke. And ſeeing fiue or ſix pikes are charged ouer the firſt Ranke, they preſent a fearefull ſight to the enemy, and double the ſtrength of the ſouldier ſtanding fortified, as it were, with fiue, or ſix *Pikes*, and ſeconded with a maine force at his backe, as the figure ſheweth. Moreouer they that are placed after the ſixt Ranke, albeit they puſh not with their pikes, yet thruſting on with the weight of their bodies, r'enforce the ſtrength, and power of the *Phalange*, and leaue no hope for the *File-leaders* to flie, or ſhift away. Some would haue the hinder pikes longer, then the formoſt, that they of the third, and fourth Rankes might beare out the heads of their pikes equally with the firſt.

[6] The *Superordinary Lieutenant* of euery *Syntagma* muſt be a man of vnderſtanding, ouerſeeing the ſouldiers of his command, that they *file*, and *ranke*; and if for feare, or other occaſion, any forſake their ground, he is to compell them againe to their places; and in *Cloſing* to put them (when neede requireth) as neare vp together, as they ſhould ſtand. For it is a great ſtrength, and aſſurance to the *Phalange*, to haue ſome principall *Commander* not onely in *front*, but alſo in the *Reare* of the *Battaile*, for the cauſes before mentioned.

Notes.

THE ſtrength of the Macedonian Phalange, *which conſiſted principally in the* [2] protenſion, *and* charging of pikes, *and knitting together of Targets, is here ſet downe. The whole Chapter ſeemeth to haue beene taken out of* [b] Polybius, *who handleth the ſame argument, and almoſt with the ſame words, but that* Ælian, *and he differ about the number of Cubits, which the Pikes take vp reaching ouer the front of the* Phalange.

a Appian. in Syriacis 97. E.
b Polyb. lib. 17. 763. E.

1 The Macedonian Phalange, hath beene thought to be vnreſiſtible] *The ſtrength of the* Macedonian Phalange *appeareth no way better, than by the conqueſts it hath made.* King Philip *was the inventer of it; and by that invention raiſed the kingdome of* Macedonia *from the pooreſt, to the powerfulleſt, and greateſt kingdome of* Europe; *and (that I may vſe the words of* [c] *Diodorus Siculus,)* finding the Crowne, at his comming to it, in bondage to the *Illyrians* made it afterward Lady of many great Nations, and Cities; and purchaſed to himſelfe, to be declared *Generall* of

c Diod. Sicul. lib. 16. 510.

Greece. And firſt ouerthrowing the *Illyrians*, *Pæonians*, *Thracians*, and *Scythians*, afterward ſet vpon the kingdome of *Perſia* to breake it, after he had enfranchiſed the *Grecian* Cities of *Aſia*. And albeit death intercepted him, yet he left ſuch forces to his ſonne *Aleander*, that he needed no other *Allies* to ouerthrow the Soueraignety of Perſia. *After his death* [d] Alexander *tooke his kingdome, and Armie, and with it encountring, and vanquiſhing* Darius *in two great Battailes, runne thorough* Aſia *like a flaſh of lightning renting a pieces all, that reſiſted, or ſtood in his way, and laid the foundation of that kingdome, which (albeit afterward diuided) continued long in his Succeſſors. Neither was the experience of their inuincibleneſſe againſt the barbarous people onely, but as much againſt the* Græcians, *who till* Philips *time were eſteemed the chiefe maſters of Armes in* Europe. *This is cleare by the victories, the* Macedonians *obtained againſt the renowned Cities of* Greece *both ioyntly and ſeuerally.* [e] Philip *ouerthrew the* Phoceans, *albeit the* Lacedemonians, *and* Athenians *ioyned with them. The ſame* [f] Philip *at* Cheronæa *defeated the power of the* Thebans, *and* Athenians *ioyned together.* [g] Alexander *tooke and ſacked the Citie of* Thebes, *that about that time was accounted the mightieſt Citie of Greece.* [h] *His Lieutenant* Antipater *foyled the* Lacedemonians *in a ſet battaile, and ſlew their King* Agis. [i] Antigonus *Tutor of King* Philip *the ſonne of* Demetrius, *broke an Armie of the* Lacedemonians *and* Peloponeſians *at* Selaſia, *and chaſed out of Greece* Cleomenes *the laſt brave King of* Sparta. *Briefely they were not beaten in the field by any Nation, but onely by the* Romans. *And yet the iudgement of* [k] Polybius, *doth in this alſo proue it ſelfe good. For where the* Romans *had theſe victories againſt the* Macedonians, *he aſſigneth this to be the cauſe, that the Phalange* at the time of the fight had not the proper place, nor meanes to vſe it owne power in the encounter; ſo long as the *Phalange* hath ground enough, and can meete the enemy with a right front, he holdeth it not poſſible to be foyled, being diuided, and in places vneven, he is of opinion, *and experience hath taught,* it may eaſily be put in a route. [l] *Plutarch* compareth it for ſtrength (ſo long as it is one bodie, and maintaineth the *Synaſpiſme* iointly) to an invincible beaſt; being diſſeuered, *he ſaith,* it looſeth the force in the whole, and in euery man particular, both in regard of the manner of arming, and alſo becauſe the violence of it conſiſts rather in knitting of all parts together, than in particular of any mans valour. *Three battailes (to prætermit diuers skirmiſhes,) I finde the* Romans *had with, and therein foyled the* Macedonians; *One againſt King* Philip, *the ſonne of* Demetrius; *an other againſt* Antiochus; *the third againſt* Perſeus *the ſonne of King* Philip. [m] *For I paſſe ouer thoſe, wherein they were beaten by* Pyrrhus, *and had the worſt.* [n] Philip *breaking his* Phalange, *and not vſing the whole together, but fighting againſt the* Romans *with the right winge onely, yet had the better, and was too hard for that part of the Roman Army, that ioyned with him; but the other winge comming into the field, fit rather for a march, than a fight, and not being able to order themſelues* Phalange-wiſe, *were ſoone defeated, and the* Roman *victorious, fell vpon the reare of the right wing (where* Philip *was, and had now gotten the victorie) and ſo wonne the field.* [o] Antiochus *vnskilfull in true ordering of a* Phalange, *truſted rather to his horſe, than his* Phalange, *and being to fight with* L: Scipio, *where hee ſhould haue giuen full ſcope, and extended the front of the* Phalange, *by making it* 16 *deepe, he contrary-wiſe narrowed it, drawing out the depth into* 32: *whereby he loſt the aduantage of matching the front of the* Romans, *and after his horſe were beaten, gaue facilitie to the enemy of encompaſſing on it all ſides.* [p] Perſeus *ioyning battaile with* Paulus Æmilius, *as long as the* Phalange *continued in the right figure, ſlew many of the* Romans, *and forced them to retire, but following on too eagerly, he came to vn-*

euen

d Diodor. Sic: lib. 17. 562. Plutarch. in Alexandro. Qu. Curt de reb. geſt. Alex. Iuſtin.

e Diod. Sicul. lib. 16. 541. Iuſt. lib. 8.

f Dio ı. Sicul. lib 16 555. Plutarch. in Pelopida. Iuſtin lib. 8.

g Diod Sicul. lib. 17. 566.

h Qu. Curtius lib. 6. 207.

i Polyb. lib 2 151.

k Polyb lib. 17 763. D.

l Plutarch. in Flamin.

m Plutarch. in Pyrrho.

n Polyb. lib. 17. 760. C. Plutarch. in Flaminio.

o Appian. in Syriacis. 107. D

p Plutarch. in Æmilio. Livy dec. 5. lib. 4. 73.

euen, and rough ground, wherein the Phalange *being diſſeuered, left ſpaces, and breaches for the* Romans *to enter and defeat it. So long then, as the* Macedonian Phalange *had fit ground, and the right property of embattailing, it ſtood faſt againſt the* Romans *the greateſt ſouldiers that euer were, being in their hands, that knew not how to vſe it (as a ſword in the hands of a childe) it yeelded to time and fortune. The cauſe of the ſtrength of the* Phalange *is aſſigned to be*

2 The manner of embattailing] *Which conſiſts principally in ordering of Target, and pike; in* cloſing *of the Targets by* Synaſpiſme, *and in* ioint charging *of the pikes; which lying out thicke from the front, beſides the horror of the ſight, giue almoſt an impoſſibilitie to enter the* Phalange. *I haue alledged the iudgement of* [r] Æmilius *concerning the ſight preſented by a* Phalange, *when the Pikes lie ſo charged out of the front.* [s] Polybius *thinketh nothing can reſiſt the force thereof.* [t] Livy, *albeit many times more than partiall to the* Romans, *yet in the ſelfe-ſame fight betweene* Perſeus *and* Æmilius *giueth his iudgement thus of the Phalange:* The ſecond Legion *(ſaith he)* inſinuated it ſelfe into the middle empty place, and ſo broke aſunder the *Phalange*. Neither was there any more euident cauſe of victory, then the fights in diuers places at once, which firſt troubled the *Phalange* in turning many waies, and afterward plainly diſioynted, and ſcattered it; whoſe forces being vnited and rough with charged pikes are intollerable. If by giuing on in diuers places you conſtraine it to bring about the pikes immoueable through length and weight, it entangleth it ſelfe with confuſed croſſings. If at one time you charge it both flanke, and reare, they fall aſunder like a ruinous building. As then they were compelled many waies to anſwer the *Romans*, and ſo to breake their battaile into many parcells. And the *Romans* vpon the firſt opportunitie of a breach ſtraight waies conueighed in their troupes, who if they had met the enemy in front, had runne vpon the pikes, as in the beginning it hapned to the *Pelignans*, being too forward to come to hand, and could not haue reſiſted the *Phalange* faſt ſhut, and ſerred vp for the encounter: *thus* Livy *concerning the Phalange. Who albeit a* Roman, *holdeth the ſame opinion that* Polybius *doth.* [u] *And in an other place telling of* Philips *encamping, he ſaith,* he was lodged in a wooddy plot, which was vnfit for the *Phalange*, eſpecially of the *Macedons*, which vnleſſe it caſt the pikes, as it were, a muniment before the Targets, (and that cannot be, but in open ground) is of no great vſe. *So then if Pikes may be charged out before the Targets, the* Phalange *is of great vſe. But, that I may not ſeeme, to rely vpon bare opinion, let vs heare by an example, or two, the experience of the Pike, and Target of the Macedonian againſt the Roman armes.* [x] *When* T. Quintus Flaminius *the Rom: Conſull had driuen King* Philip, *and his army from the ſtreights neare* Antigonia, ſeeing that the enemy kept himſelfe with his ſtrength, and abſteined from the field, he determined to try the Cities of *Theſſaly*; and hauing wonne ſome by force, ſome by feare, he came before *Rhage*, and beſieged it. He found the ſiege longer, and more difficult, then any man would haue thought. And the enemy made his reſiſtance, that way, the *Conſull* would hardly haue beleeued, he could. For he imagined that all his labour ſhould be in throwing downe the walls. If once he found paſſage for the Army to enter, there would after be nothing elſe, but flight and ſlaughter, as is wont, in wonne-Cities. But after that part of the wall was throwne downe with the Ramme, and the Armie entred the Citie by the breach, it was the beginning of a new and freſh labour. For the *Macedonians*, that were there in Garriſon, being many, and choſen, thinking it alſo a glory to them, if they could defend the Citie, rather with

[r] Plutarch. in Æmilio.
[s] Polyb. lib. 17. 764. A.
[t] Livy Decad. 5. lib. 573. C.
[u] Livy decad. 4. lib. 1. 18.
[x] Livy decad. 4. lib. 2. 30. C.

armes and valor, than with walles, *ſerring* themſelues cloſe together in a deepe *Phalange*, when they perceiued, that the Romans began to enter the breach droue them out, the place being cumberſome, and hard to make a retreat. The *Conſul* much offended therewith, and thinking that ſhame concerned not only the delay of winning one Citie, but alſo the ſtate of the whole warre, (which for the moſt part dependeth vpon moments of ſmall matters) purging the place which was heaped vp with the fall of the halfe-ruined wall, aduanced a Tower which in many ſtories was ſtuffed with multitudes of armed men, and ſent beſides *Cohorts* vnder their Enſignes to breake with maine force (if it were poſſible) the body (they call it the *Phalange*) of the Macedonians. But the kinde of weapons and fight was more aduantagious for the enemy, than for the Romans; eſpecially in that place, which was narrow, and ſtreightned with the ſmall ſpace of the ouerthrowne wall. When the Macedonians, *ſerring* themſelues cloſe, had charged pikes of a great length before their front, and the Romans, after their darts throwne in vaine againſt the *Teſtudo* compacted, as it were, of the thicke knitting together of the Targets, had drawne their ſwords, they could neither come vp cloſe, nor cut a ſunder the pikes. And in caſe they cut the heads of, or broke any, the ſteale amongſt the reſt of the whole pikes filled vp the roome with their ſharpe fragments. Ioyne that that part of the wall, which was yet whole, ſecured the enemies flankes on both ſides; neither needed they much ground in retiring or advancing to charge, which things are wont to cauſe the breach of array. There alſo fell out a chance which increaſed their hopes, and ſpirits. For the Tower being driuen on vpon a rampier, that was not well rammed vnderneath, but had looſe earth, one of the wheeles ſinking deeper into the ground than the reſt, made the Turret to nodd, & lie of one ſide, that both the enemy beleeued it would fall, and they within it were put in a pitifull feare. When nothing ſucceeded well, the *Conſull* was euill appaide, that the Macedonian ſouldiers, and kinde of Armes, might ſeeme matcheable to his, and ſeeing no great hope of ſpeedy winning the Citie, and that the place was vnfit to winter in, raiſed his ſiege. *So here the Macedonian ſouldier is not onely equalled, but alſo preferred before the Roman, and that onely by reaſon of his armour, the* Pike *and* Target. *An other experience fell out in the battaile betwixt* Perſeus, *and* Æmilius, *whereof I ſpake in this Chapter. The ſtorie is this:* The Romans comming to ioyne battell with the Macedonians, and not able to come vp to them by reaſon of the length, and ioint *out-bearing* of their pikes. There was one *Salius* a Captaine of *Pelignans*, who tooke the Enſigne of his Company from the Enſigne-bearer, and threw it into the *Macedonian Phalange*. The *Pelignans* ranne in heapes to the place (for it is not lawfull, nor honeſt, for the *Italians* to forſake their Enſignes) where the medley brought forth wonderfull effects. For the *Pelignans* fought with ſwords to put by the pikes, and to preſſe them downe with their Targets. And ſeazing vpon them to pull them out of the handes of the Macedonians. The Macedonians contrary-wiſe, maintaining their charge with both hands, and ſtriking ſuch, as approched neare, thorough the bodies, armes and all, neither *Target* nor *Curace*, being able to ſuſtaine the violence of the blow, turned topſy-turuy the bodies of the *Pelignans*, who not with reaſon, but with the rage of wilde beaſts, threw themſelues deſperately vpon wounds, and vpon certaine, and fore ſeene death. So the formoſt falling, the followers began to ſlacke. And yet they fled not, but retired to the mount called Olacrus. *I will out of* Appian *ioyne a third experience in the battaile of* Antiochus *againſt*

Plutarch. in Æmilio.

Appian. in Syriacis. 109. B.

againſt L. Scipio, *which I likewiſe touched before in this Chapter.* As ſoone, as the Horſe, and Chariots of *Antiochus* were put to flight by the Roman horſemen, and by *Eumenes*, his *Phalange* of foote being deſtitute of horſe, firſt opened, and receiued the light-armed, (that had all this while fought in the front) into the middeſt of it. Then after-ward againe cloſed. And when *Domitius Scipio's* Lieutenant, incompaſſed it round with horſe and light-armed, which he might eaſily doe, by reaſon it was thruſt vp into a thicke *Plinthium*; it was driuen to great diſtreſſe; being neither able to charge the enemy, nor yet to countermarch in ſo great depth, as it carried. It grieued them much, that their long experience nothing auailed them to annoy the enemy, and that notwithſtanding they were ſubiect to arrowes, and darts at all hands. Yet, bearing out a multitude of pikes on euery ſide of their ſquare, they called the Romans to come to handy blowes, and ſtill made a countenance, as though they meant to charge, keeping themſelues for all that within their Ranks, as being footmen, and heauy armed, and the rather, becauſe they had to doe, with an enemy on horſe-backe. Beſides they were loth to breake the thicknes of their battaile, which forme they could not now alter. The Romans alſo, durſt not approach them, and come to ſword, fearing their experience in warre, and cloſeneſſe of array, and deſperation. But running about here, and there, plied them with arrowes, and darts, whereof none was throwne in vaine, falling amongſt a troupe ſo cloſely put vp together, that they could neither auoide, and decline any thing throwne, nor giue way, albeit they ſaw it comming. At laſt being weary, and irreſolute what to doe, they retired eaſily, with a threatning countenance notwithſtanding, and in good order, and not deliuering the Romans of feare, who durſt not yet come neare, but ſought to annoy them aloofe; till the Elephants placed in the *Macedonian Phalange*, being affrighted, and not to be ruled by their Gouernours, troubled all, and gaue occaſion of flight: *hitherto* Appian. *Out of theſe three examples, the truth of that, which* Ælian *ſaith, is to be ſeene, that is, that the* Macedonian Phalange *can not be forced, or reſiſted by an enemy, (taking with all* Polybius *his caution) if it be in the right poſture, and figure, and haue ſuch ground, as is fit. The* Romans *the beſt ſouldiers of all antiquitie were* repulſed by it at a ſiege, forced to retire in a battell, durſt not come neare it, *after they had gained the field of the reſt of the Army. And the* Conſull Æmilius, *a man that had ſeene much ſeruice, and fought many a battaile, and was one of the beſt* Generalls *of that time, confeſſed,* he neuer ſaw ſo fearefull a ſight, *as when he beheld the* Phalange *advancing into the field, the bodies* ioyned, *the Targets* ſerred, *and locked together, darting out fire like lightning, the* front *rough with couched, and charged pikes, and armed with yron, and threatning preſent death to him, that durſt approach.*

3 Occupying two Cubits of ground] *We may not take it, as though the ſouldier betwixt file, and file had two Cubits, or three foote of ground. For we learned before that in* locking vp the Phalange, *the diſtance betweene man, and man in front was but a Cubit. But it is to be vnderſtood betweene* ranke *and* ranke. *For* Polybius *ſaith, that the ſouldier ought to haue roome for the vſe of his weapon, which cannot be, without granting him three foote behinde, the pike being ſome-times to be puſhed forward, ſome-times to be drawne backe, ſometimes otherwiſe handled, as occaſion of fight ſhall require.*

The length of the Pike is 16 Cubits] [a] *Sixteene Cubits, which is twenty foure foote, is a great length for a Pike, and it verifieth the words of* Livy, *that the* Macedonian Pike is vnwealdy, *by reaſon of the length, and weight;* See Leo cap. 5. §. 3. & cap. 6. §. 32.

yet doe wee read of pikes of that length. The [b] Ædessans had such. The [c] Chalybes pikes were about 15 cubits long. [d] But 16 was the length at the first, the Macedonians brought it to 14, which they tooke to be a sufficient length against the enemie, and easier for the Pike-man to beare and handle.

b Polyen. lib. 2. in Cleonymo § 2.
c Xenophon de expedit Cyr lib. 4. 338. C.
d Polib. l. 17. 764. A.

4 The space in charging betwixt the handes taking vp two cubits] *Herein is a difference betweene* Ælian, *and* Polybius. Ælian *would haue no more, then* 2 *cubits lost in charging;* [e] Polybius *saith* 4, *are lost, and with* Polybius *agreeth* Leo. *But the cause of the difference ariseth out of the forme of the pike, and of the manner of holding it in the charge. If it be held at the butt end with the right hand, and supported toward the armed end with the left, as the manner in charging is, it cannot loose aboue two cubits, and* Ælian *is in the right. But if, in holding it, you set the right hand* 2 *cubits from the butt end, then must* 4 *cubits of necessitie be lost. Whereof* 2 *rest behinde the right hand, the other two are taken vp by the space betwixt both hands. Our manner of charging is at this day, to take the butt end in the right hand, and in so doing we loose but two cubits. But it seemeth our pikes are not made in that forme, they were in* Polybius *time. In* Polybius *age they had weights at the butt end to make the sharpe end the lighter, as the heauie pummell lighteneth the sword in handling.* [g] *This weight was called* [h] secoma, *as it were a* counter-weight *to the heauinesse, and length of the pike. Neither do I read any thing elsewhere then in* Polybius, *concerning the* counter-weight *of a pike. To the handle of an Oare, I finde in* [i] Atheneus, *that lead was added, to make the part standing out from the shippe more light. But yet* Polybius, *and* Ælians *opinions may well agree, and in pikes that haue* counterweights *at their ends (the hold for charging being taken two cubits from the butt end) there may be lost foure cubits, where the other sort being held at the butt end it selfe, loose but* 2 *cubits.*

e Polyb. 17. 764. A.
f Leo cap. 6. § 39.
g Polyb l. 17. 764. A.
h See Iul. Pollux for secoma. l. 4 c. 24. § 1.
i Athen. dipnosoph. lib. 5. 204. A.

5 The pikes of the other behinde, cannot reach to the first ranke] *How shall they beare their pikes then?* [k] Polybius *sheweth, what the manner was.* Those rankes, *saith he*, that stand behinde the fifth, can helpe nothing to the fight in front. And therefore they charge not their pikes low, but beare them towards their forestanders shoulders, the points somewhat erected to secure the battaile from aboue, intercepting by their thicke lying the missiue weapons, which flying ouer the front, would otherwise fall vpon their heads, that are placed toward the reare. Polybius *saith, the manner was,* (*neither to* charge, *nor* order *their pikes, but*) *to beare them forwards sloping towards the shoulders of their companions before. Yet by bearing them so, what security they could giue from the missiue weapons, that came aloft, I cannot yet conceiue. An arrow, dart, or stone, vnlesse it hit iust on the middest of the pikes, would do as much, and sometimes more, harme by glancing, then if it had not touched them at all.*

k Polyb. l. 17. 764. D.

Some would haue the hinder pikes longer] *The opinion of them, whom* Ælian *here speaketh of, hath little reason to ground vpon. For either the pike of them that come in the fiue rancks behinde, especially the two last, must exceede in length, or else the file-leaders pikes in shortnesse, both which are alike vnprofitable. If they bee too long, they cannot be weilded, if these too short, the enemie shall reach the file-leaders, and not the file-leaders the enemie. The measure of the longest pike was* 16 *cubits, which yet for aptnesse and vse was by the* Macedonians *reduced to* 14. *Say then the sixteenth ranke carrieth pikes of* 16 *cubits; two of the cubits according to* Ælian, *are taken away in handling, other ten by reason of the distance of the fiue former rankes. Foure cubits alone remaine, and reach ouer the front. If the file Leader in the front shorten his pike to foure cubits to make an euen* extention, *he shall not come neere the enemie by ten cubits, who in pushing will reach home to him. For what length soeuer, is taken from the file-leader in front,*

front, the ſame is giuen to the enemie, that puſheth with him. And hee ſhall bee able to wound the file-leader, and not the file-leader him, eſpecially the pikes differing in ſo great a proportion.

6 The ſuperordinarie Lieutenant of euery Syntagma] *I haue before noted the dutie of a Lieutenant of the* Syntagma, *and it is here well expreſſed by* Ælian. *He, that deſireth to ſee more touching the ſame, let him reſort to* Xenophons Cyropædia: lib. 3. 28. *and* lib. 7. 178. B. *and to* Leo, cap. 14. §79.

The place of the light-armed, and the number of euery file.

Chap. XV.

THus much of ordering and marſhalling the armed-foote. I will adde a word, or two, of the light-armed, or naked. 1 The Generall is to place the light-armed ſo, that they be readie for all attempts of the enemy, ſometime in front, ſometime in flanke, ſometime in the Reare, according to occaſion or neceſſity. For our purpoſe let them be thus ordered: We will frame alſo of them 1024 files as many, as the *Phalange* of the armed conteined; So that the firſt file of the light-armed be placed directly behinde the firſt file of the armed, and the ſecond file behinde the ſecond, and ſo the reſt. 2 Yet ſhall they not be ſixteene to the file, but halfe ſo many, namely eight; ſo that in 1024 files there ſhall bee eight thouſand, one hundred, ninety two men.

Notes.

1 HItherto *all things concerning the* arming, filing, embatteling, number, command, diſtance *and* precedence *of the armed are declared; and likewiſe, of the* arming of the light *and ſomewhat of their place. Now followeth the filing, ranking, and place more exactly, and their manner of embattailing, with their ſeuerall bodies, and commaunds.*

1 The Generall is to place] *I haue ſpoken ſomewhat before of the placing of the light. I will now onely adde a paſſage of* Leo *tending thereunto.* 2 Leo *ſaith thus,* you ſhall range the Archers behinde the reare of euery file according to the number of the file, (*that is foure light for twenty ſix armed, proportioning an Archer for euery foure armed. Or if it be* needfull, you ſhall order them within the files, an armed, and an Archer. Sometimes without the wings of the battaile; that is within the Horſe. Oftentimes without the Horſe a little diſtance, with a few *Targetiers*, to defend the vttermoſt flankes of the Horſe. And this is to bee done, when you abound in multitude of light-armed. But thoſe, that vſe ſmall darts, and iauelins, and ſuch like are to be placed, either in the reare of the armed, or in the wings of the battaile, and not in the middeſt. The ſlingers are alwaies, to bee ſet in the wings. *Thus* Leo *placeth his light armed. But* Ælian *here (as before in the ſeuenth Chapter) deſigneth their place in the* reare, *but ſo, that hee leaueth it to the Generalls choice, and to the occaſion of ſeruice to place them, as moſt befitteth. Being ſet behinde, as* Ælians *order is, they muſt anſwer the armed in number of files, & be directed by the files of the armed for their ſtanding; that is euery file of the light-armed is to order it ſelfe in a right*

a Leo cap. 14. §69.

right line after a file of the armed in such manner, as the armed are before embattailed.

Ælian *in the beginning diuided the foote into three parts,* Armed, Targetieres, *and* light-armed. *To the* armed *he hath giuen place, and maketh the* Phalange *to consist of them, the* light-armed *he rangeth in the reare of the armed, what shall become of Tagetiers? for he speaketh not a word of placing them. By that I read in* Arrian *I would think, they were placed amongst the light-armed, and next to the armed. First because* Ælian *saith, many number them amongst the light. Then I see the* Hypaspists *placed betwixt the Horse, and the armed in* Alexanders *fields, at* Granicus, *at* Issos, *and at* Gaugamela; *Lastly* Leo *in the passage before recited, when he placed the light-armed without the Horse, he ioyneth Targetiers with them, for their safegard.* [b] Cyrus *likewise placeth them next the armed in the reare; and after them the Archers.*

2 Yet shall they not be 16.] *The file of the light-armed is lesse in number, then the file of the armed. For if they should be 16 in file, the number being but halfe to the armed, they should not be able to make aboue 512 files, and breeding there by a disproportion both in placing, and correspondence one to an other, not equall the length of the* Phalange. *Besides standing eight in file, and in the reare, their flying weapons will bee sent with more force against their enemie; In as much as the hindermost of them are neerer the enemie by twentie foure foote, which the last eight in a file of 16 deepe take vp. And* missiue weapons, *the lesse their compasse is, when they are sent against a marke, with more violence they pierce. As they hurt not greatly, if the distance be too farre, from whence they come.*

The names of the bodies of the light-armed.

Chap. XVI.

THeir names and degrees are these. Foure files of light-armed are called [1] a *Systasis* of 32. men. Two *Systasies* a [2] *Pentecontarchy* of 64 men. Two *Pentecontarchies* [3] a *Century* of 128 men. In euery *Century* ought to bee 5 *Superordinarie* men: an *Ensigne*, a *Reare-commander*, a *Trumpetter*, a *Serieant*, and a *Crier*. Two *Centuries* containe 256 men, and are called [4] a *Pfylagy*. Two *Pfylagies* a *Xenagy* of 512 men. Two *Xenagies* a *Systremma* of 1024 men. Two *Epixenagies* a *Stiphos* of 4096 men. Two *Stiphos* an *Epitagma* of 1024 *files*, 8192 men. These ought also to haue 8 Superordinarie men, whereof foure should bee *Epixenagies*, the other foure *Systremmatarchs*.

Notes.

As the armed were distinguished, and seuered into diuers bodies in the Phalange, *so are the light-armed, in whom there ought to be no lesse order, then in the armed. A multitude vndigested bringeth with it disorder, and confusion. Neither can any seruice be expected from them, who by apt diuisions are not cast into bodies fit for seruice. We haue before spoken of the names of the bodies of the armed, and noted, that they were not imposed with such propriety, that they could be applied to no other thing. At the first warre was made, and men fought (as wild beasts graple together) led with furie, and rage, and not with skill: and he preuailed that was the strongest. Experience taught there were aduantages in* Time, *in* Place, *in* Order, *in* instruments *of fight, in* placing of men, *and*

in

in other circumſtances. Hence ſprung the Art of Warre, the diuers formes of weapons, and the figures of Battailes. For the ſpeedy framing whereof, the ſmaller bodies were inuented, of which they conſiſt. In building of a houſe, you firſt bring timber together, and other matter, and then of it frame walls, dores, windowes, rafters, beames, and the roofe, which muſt be all conioyned together, before the faſhion of the houſe will appeare: So in an Army the proviſion of men was firſt requiſite, which being found, and brought together by Leavies, were armed, and after ordered into ſeuerall bodies; and theſe being compacted together, ſet out the frame and faſhion of the Phalange. *And as all things newly inuented, ſtand in neede of names to diſcerne them from other things; So names were giuen vnto the bodies not proper, and fit; but ſuch as Military wits thought conuenient enough to ſignifie the things they meant. I haue noted it before in the names of the* Tetrarchy, Taxis, Syntagma, *and other, and it will appeare againe in this Chapter.*

But here I may not prætermit the curioſitie of the Græcians *in their appellations, and their plenty of ſpeach, apt to giue diuerſitie to things, that are diuers. For where there are bodies, amongſt* armed, *and* light-armed, *which conſiſt of the ſame number, and therefore, as it ſeemes, might well enough haue beene comprehended vnder one name, they notwithſtanding to auoide confuſion, and for perſpicuities ſake haue thought good to call them by ſundry names. Thirty two armed men are called a* Dilochi; 32 *light armed are a* Syſtaſis; 64 *armed are a* Tetrarchie; 64 *light armed a* Pentecontarchie; 128 *armed a* Taxis; 128 *light, a* Hecatontarchie. *Our tongue will not afford ſuch variety. For albeit in common ſpeach we diſtinguiſh the kinde of ſouldier; yet confound we the name of the body, and of the command. A certaine number of Pikes vnder a Captaine we call a company of Pikes; So many ſhot vnder a Captaine we likewiſe call a company of ſhot. The Captaines, one a Captaine of Pikes, and the other a Captaine of ſhot. A company of* Curacers *of horſe, we call a troope of* Curacers; *as many* Argoleters, *a troope of* Argoleters. *The Commanders of either of them we terme* Captaines, *the one of* Curacers, *the other of* Argoleteres. *But let vs come to particular explication.*

1 Aſyſtaſis] *It commeth of* Syniſtemi *to ſtand together: and* aſyſtaſis *is a ſtanding together; which word albeit it may be extended to any kinde of people aſſembled, and ſtanding together; yet it is here appropriated to ſouldiers; and more particularly to 4. files of light armed, conſiſting of 32 men, 8 men going to the file.*

2 A Pentecontarchie] *The command of 50 men. And ſo it was vſed of olde. But the* Macedonians *gaue 64 men to this command, and yet retein'd the name, becauſe it was familiar, and well knowne.*

3 A Century] Ælian *calleth it a* Hecatontarchie, *the command of a 100 men. The name was vſuall before the* Macedonians *time, and it conteyned 100 men. But the* Macedonians *gaue it 128 men. This was anſwerable to the* Syntagma *amongſt the armed, and had the like officers. Yet whether it had a Captaine, or no, may be ſome doubt; the rather becauſe* Ælian *in this Chap: nameth no Commanders, but* Syſtrematarchs, *and* Epixenagies; *and thoſe he would haue ſuper-ordinary. For my part, I thinke they had* Centurions *alſo. For as euery body of the armed had a head, ſo I would thinke it requiſite alſo amongſt the* light-armed, *eſpecially ſeing there was a* Bringer-vp, *and other* officers *belonging to a Company; which vnleſſe they had a Commander, would become vnprofitable. For if there were no Captaine, to whom ſhould the* Crier, *or* Trumpet, *or* Sergeant *of the* Centurie *reſort for direction? Adde, that the* light *were often drawne to the* winges, *to the* front, *or other places of ſeruice, which could not be done without Leaders. For to put a* Syſtrematarch, *or an* Epixenagie *to lead a* Century, *were to leaue the reſt of the* Centuries *vnder them without a Commander. Beſides,*

the

the Macedonians were very particular in their commands, and left no body without a head; which is the cause of the multitude of Commanders in the Phalange. But they are not here mentioned. No more are the [a] Commanders of the horse in the diuision of the bodies of the horse, and yet I thinke no man will doubt, but the horsemen had Commanders. Lastly, I finde in the Græcian historie, Captaines of the light-armed often named. [b] Episthenes is said to be Commander of the Targetires, in a fight the Græcians had against the Persians. [c] Stratocles commanded the Cretan Archers in the returne of the Græcians out of Persia. [d] Eurybates Captaine of the Cretan Archers in Alexanders army was slaine by the Thebans at the siege of Thebes. [e] When Antiochus the Captaine of the Archers was dead, Ombrio was chosen in his place. Mention is made also in [f] Arrian of Clearchus the Captaine of the Archers. And when Ælian calleth the 4 Systremmatarchs, and the 4 Epixenages superordinary (Ectactous) he might haue said as much of all the other Commanders. And he saith expresly of the officers of the Centurie, that they were superordinary (Ectactoi).

a after cap 20.

b Xenoph. de exped Cyri, lib. 1. 270. D.

c Xenoph de exped. lib. 4. 322 D.

d Arrian. lib. 1. 9. C.

e Arrian. lib. 2 55.

f Arrian. lib. 1. 23 B.

4 A Psylagi] The word is a body of light-armed. Which word, if it were taken, as it naturally signifieth, is common to, and comprehendeth all the bodies of the light-armed, whereof Ælian speaketh in this Chapter. But here it is restrained to a body of light-armed, which compriseth 256 men, and 32 files, and so it is to be taken.

A Xenagie] That is, a command of strangers. Ælian before saith, that a Syntagma was by some called a Xenagie. I haue giuen my opinion there of the originall of the word, which I neede not to repeat here; This onely I will note, that of all the bodies of the light-armed, no one hath a common name with the body of the armed, but onely the Xenagie. And Ælian giueth also that body of the armed an other name, calling it a Syntagma. The Xenagie hath in it 512 men, and 64 files.

A Systremma] [g] It signifieth a conglobation, or trouping together. Proper names are wanting for these bodies, and therefore such taken, as might at any hand signifie the thing meant. In continuance of time vse hath gained a passage, and made them to be accepted as proper enough. The Systremma conteineth 1024 men, and 128 files. There is nothing to be found in Ælian of the Chiliarchie of the light-armed; Yet doth [h] Arrian mention 2 Chiliarchies of Archers in the Army of Alexander.

g Polyb. lib. 1. 47. B.

h Arrian. lib. 95. C.

An Epixenagie] A command aboue a Xenagie; As afterward in the command of the horse, there is an Ephipparchie aboue a Hipparchie. The word is improper and hard enough; but when it is receiued by vse, what should we seeke for more? It conteineth 2048 men, and 256 files.

A Stiphos] It is deriued from steibo, to thicken, and in penury of an other name, this body of the light-armed is called Stiphos, because they are thickned, and thronged together. There is in it 4096 men, and 256 files.

An Epitagma] Is the last body amongst the light-armed. The signification of Epitasso is to place behinde. From thence commeth Epitaxis, placing the light-armed in the Reare, which word is after vsed by Ælian. Epitagma is deriued from the same fountaine; and it is called Epitagma, not of placing behinde, (for sometimes they were placed before, sometimes in the flanke) but it was the best name they could giue to the whole light-armed. And yet it may be, that because all the light-armed in auncient time were placed behinde, the whole masse was called Epitagma, as being placed after the armed in the reare. The Epitagma hath in it 1892 men, and 1024 files, for so many light-armed attend the Phalange.

after cap. 31.

Eight superordinarie men] Why these eight men should be superordinarie more than the rest of the Commanders, I conceiue not yet. If Ælians meaning be, that these alone shall command the light-armed, historie and practise of auncient times convince the contrary.

contrary. Besides where he nameth foure Epixenagies, *it agreeth with the number, that are in the* Epitagma *of light. But where hee addeth foure* Sistremmatarchs *more to make vp the number of the eight Superordinarie, it is hard to knowe, which foure hee meaneth, considering there are eight* Sistremmas *in the* Epitagma.

Now because the files of the light-armed *are in embattailing to be marshalled to the files of the armed, I thought good to set downe, how the bodies of both agree, by comparing them together in files, not in number of men. For in number of men they cannot well agree, because the file of the* armed *hath more, then the file of the light-armed. And the number of the* armed *in grosse is* 16384, *of the light-armed but* 8192. *And I will first begin with the* Systasis, *because it is the least body of the light.*

The bodies of the armed,	The bodies of the light-armed.		
A Tetrarchie	*A Systasis,*	4	files.
A Taxis	*A Pentecontarchie,*	8	files.
A Syntagma	*A Hecatontarchie,*	16	files.
A Pentecosiarchie	*A Pselagie,*	32	files.
A Chiliarchie	*A Xenagie,*	64	files.
A Merarchie	*A Sistremma,*	128	files.
A Phalangarchie	*An Epixenagie*	256	files.
A Diphalangarchie	*A Stiphos*	512	files.
A Tetraphalangarchie	*An Epitagma*	1024	files.

The vse of light-armed foote.

Chap. XVII.

Darters, Archers, and all other, that vse flying weapons, are good [1] to begin the fight [2] to prouoke the enemie, to breake and shatter armour, [3] to wound, annoy, and beate downe a farre of, [4] to disaray the enemy, [5] to repulse their horse, [6] to beat in their light-armed, [7] to discouer suspected places, and to lay Ambushes. Lastly these first vndertaking the Skirmish, and continuing it with the rest, and seconding them, and seruing [8] for speedie, and farre-of-attempts, worke many, and great effects in fight.

Notes.

The arming, place, filing, bodies, and command of the light-armed are hitherto handled: Now followeth the vse, and service they performe in the field. And first wee are to thinke of the bodie of an armie, as of the body of a man; that is compact of seuerall parts: Of which some parts are of more vse then other; some being able to performe their function without the helpe of the other, some except the other help, can doe nothing to purpose of themselues. The parts of an armie are like. The armed *are the strength of the field, and are the refuge for the rest in extremitie. The* light *ioyned with the* armed, *worke great effects (those which Ælian speaketh of in this Chapter and many more) without them they cannot so much as maintaine a place in the field. And as* Xenophon *saith,* [a] Xenoph. Cyrop. lib. 7. 188. C. *Let them be neuer so many in number, yet dare they not stand or abide a fewe armed. In which respect, a place fit hath alwaies beene sought for their service, to secure them from the accesse of the Horse, or of the enemies armed. Which place was either be-*

hinde

hinde the Phalange (*as* Ælian *here would haue it*) *or else in the wings betwixt the Horse, and the armed, or if they skirmished loose before the front, and chanced to bee prest with the enemy, they retired into the interualls, and conueied themselues behind the*
b Leo cap. 14. § 105. Phalange *in safetie.* [b] Leo *saith*, if there be any place of strength, it will much helpe the light-armed. For after their flying weapons spent, retiring thither, they will be in more securitie, as a steepe rockie place, or the bancke of a riuer, or a high hill, or such other. *Our stories report, that at the battaile of* Agincourt *in* France *200 English Archers were bestowed in a meddow fenced with a deepe ditch; from whence they so gauled the French horse and foot, that they were a great helpe to the victorie. The like happened before at* Poitiers, *where that braue Prince of* Wales *eldest sonne of* Edward *the third, hauing to fight with the whole power of* France *vnder the leading of their King, gaue safegard to his Archers, with hedges, and ditches, and other strengths. So that the French-horse hauing no accesse to disorder them, were ouerwhelmed with the tempests, and stormes of their arrowes, and such a victory obteined by our nation, as might match the most renowmed of all antiquitie. To say nothing of the inuention which* Henrie *the fifth vsed against the horse of* France *for securing his Archers. The storie saith, he deuised stakes of two yards long, and armed both ends with pikes of iron, the one to sticke into the ground, and the other to gall, and enter the horses bellies, in case they came to charge our Archers home. By meanes whereof he caried the famous victorie of* Agincourt. *This for the assurance of the light armed, when they come to fight, without which assurance, their seruice would be weake, and scarce worth the hauing. Their seruice then according to* Ælian *hath many particulars. And they are good to*

Prouoke the enemie] *If the enemie be in a wood, a fenne, a hill, a fort, a towne, or other place of strength, that admitteth no accesse, the manner hath beene to send out the light armie to shew themselues, and with a Brauado to towle him out of his aduantage, and bring him into the field, where he may more easily be dealt withall. Examples are plentifull, but I will content my selfe with a* Macedonian *example.*
c Arrian lib. [c] Alexander leading his armie against the *Triballs*, that had hid themselues in a wood, commanded his Archers, and Slingers to runne out, and to shoote, and sling amongst the *Barbarians* to see, if he could towle them into the plaine. The Archers, and Slingers spared not to let flie, and the *Triballs* being wounded with arrowes, threw themselues out of the wood with all speed, to fall vpon the vnarmed Archers. *Alexander* presently commanded *Philotas* with the Horse of vpper *Macedonia* to charge the right wing; on which part they cast out themselues furthest. And *Heraclides*, and *Sopolis* with the horse of *Bottiea*, and *Amphipolis* the left, himselfe stretching out in length the Phalange of foote, & setting the rest of horse before the Phalange, led against the midst of the enemie. As long as it was but a skirmish, the *Triballs* had not the worst. But after the Phalange close serred came vp roundly to them, and the Horsemen charged them no longer with darts, but pressed, and ouerbore them with their horse, they fled thorough the wood to the riuer.

d Leo cap. 14. § 104. Ciu. Decad. 5. lib. 2. 39. B. To beginne the fight] [d] *Leo agreeth.* If, *saith he*, we haue light-armed enough, let them, before the armie ioyne, send their darts, and arrowes at the enemie, and after the fight of the armed is begunne plie the flanke with their missiue weapons, that at ouce both their flankes may be assaulted. *It hath beene and is now the ordinarie course to beginne the fight with the* light-armed. *And because wee shall read of no battaile almost wherein it was not so, I will forbeare examples.*

To wound a farre of] *The* light *serue to great purpose, if the Generall desire not to come neere to fight, but seeke to annoy his enemie a farre of without danger of his owne*
e Liu. decad. 4. lib. 8. 161. B. *folkes* [e] Liuy *telleth of* Cn. Manlius Volso, *that being to make warre against the* Gallo

Græcians,

Græcians, *that fled into the mountaines, and awaited the* Romans *there, and ſought to defend themſelues, by aduantage of the place, he prepared great plenty of darts, arrowes, bullets, and ſmall ſtones for Slinges: and leauing his legionarie ſouldiers behind, led his light armed, againſt the enemy, that poſſeſſed certaine ſtraights, by which his armie muſt paſſe. After ſome fight the* Gallo-Græcians *being not ſufficiently armed, to defend their bodies from the miſſiue weapons, the light-armed of the* Romans *forced the paſſage. And following them euen to the Campe, where their Companions came to their aide, they firſt droue them into their Campe, and after the Legionarie Souldiers comming vp, they wonne it. I haue before rehearſed the hiſtorie of* Iphicrates, *who with his Targetires (that came ſeldome to hand blowes, but plied the enemie with darts a farre of) ouerthrew and ſlewe a whole* Moira *of the* Lacedemonians. *The* Acarnans, *likewiſe with this kinde of fight, much incumbred* Ageſilaus, *that made an excurſion into their Countrey. The ſtory is this,* [a] Ageſilaus *hauing taken a great prey, in the territory of the* Acarnans, *reſted that day, where he had taken it, being buſie in ſelling of it. In the meane time many* Acarnan *Targetieres aſſembled themſelues together, where* Ageſilaus *was incamped vpon the ſide of a mountaine, and with darting and ſlinging, they forced his Campe to deſcend to the plaine, themſelues in the meane time being free from hurt. The next day* Ageſilaus *led away his armie. The paſſage out of the place was ſtraight, by reaſon of the mountaines lying about in a circle, which the* Acarnans *poſſeſſing, plied the* Lacedemonians *with darts, and ſtones, from the higher ground, and ſometimes deſcending to the skirts of the hills, they preſſed the armie ſo, that it could not moue forward. And when the armed, foote, or horſe, fell out vpon them, they profited little: For the* Acarnans *retired* immediately, to their ſtrength. *Ageſilaus* perceiuing it would be hard for his armie to winde out of thoſe ſtraights, ſo long as the enemy ſo hung vpon them, reſolued to charge thoſe on his left hand. For the aſcent on that ſide was more eaſie, both for his horſe, and armed foote. Commanding therefore, his men to charge, the armed (of 29 yeeres of age) firſt fell on, and the horſe after them vpon the ſpurre. Himſelfe followed with the reſt. The *Acarnans* therefore, that were deſcended, and buſie a darting, were quickly put to flight, and many ſlaine in ſeeking to remount the hills. But their armed foote, and moſt of their Targetiers, ſtood imbattailed on the toppe, and from thence both threwe other miſſiues, and lanced lauelines, wherewith they wounded horſemen, and killed ſome horſe. But being ready to be charged by the *Lacedemonian* armed, they fled, looſing ſome 300 in the flight. *Theſe* light-armed *then, as long as they can keep aloofe from the enemie, annoy them ſore by wounding (as Ælian ſaith) a farre of; as ſoone as the armed come vp, they are glad to quite their place, and ſaue themſelues by flight.*

[a] Xenoph. hiſt. Græc. lib. 4. 513. D.

4 To diſarray] *So long as a battaile remaineth in order, no victorie is gotten againſt it. Breaking of array, and disbanding, are companions of flight, and of forſaking the field. The armed, that are to endure the efforts of the light armed, muſt either keepe ſtill their order, and ſuffer themſelues, to be knocked downe, and ſlaine, as they ſtand, or elſe prouide for themſelues, by flight, or by yeelding. For the* light-armed *effect with their miſſiue weapons the one, or the other. An* [c] *example may be ſeene in the* Ægyptians *in* Cræſus *his battaile, who after the defeate of the reſt of the armie, maintained yet the fight, and yeelded not to* Cyrus, *though he had now the victorie.* Cyrus *at the firſt charged their backes with his horſe, and being not able to breake them, was faine to command his Archers, and darters, to ſhoote and caſt their darts at them: wherby the* Egyptians *after many wounds, and loſſe of their people, were finally conſtrained to yeeld. A like example is before alledged* [f] *of* Domitius *the Lieutenant of* L. Scipio, *who with miſſiue weapons alone forced the* Macedonian *Phalange to ſcatter, and take themſelues to flight.*

[c] Xenoph. Cyro. lib. 7. 178.

[f] Appian. in Syriacis 109. B.

5 To repulse their Horse] *The* light armed *alone, without a sure retreate to the armed, or else some place of strength, can doe little in repulsing of horse. I haue shewed before in the* [b] *exploite of* Crassus *into* Persia, *how the* light armed *were beaten in by the* Persian *horse, and by the shew of wounds, they receiued, and with their feare, discouraged the armed. The like happened in* [c] Antonies *retreate out of* Persia, *the* light-armed *being faine to shroude themselues from the* Persian *horse within the* Phalange *of the armed. Be they neuer so many, without some such assurance the horse will soon ouerrunne them; hauing this assurance their seruice much afflicteth horsemen both in wounding them, and in killing their horse. Therefore* [d] *of ancient time it was vsuall to mingle* horse, *and* light armed *together. For the enemies horse so charged, cannot be able to resist both. A notable example is in* [e] Hirtius: Cæsar, *saith hee,* hauing a iourney in hand, and but a small number of Horse, and legionary Souldiers, was in his way set vpon by the enemie abounding in store of Horse, and of light armed *Numidians* amongst them. And when the Souldiers of *Cæsar* fell out to charge, the enemies horse galloped away, and the foote stood fast, till the Horse with a full carreare returned to the rescue. *This kinde of fight troubled* Cæsar *much; and would haue troubled him more, had hee not recouered hills, that were not farre of, and by that meanes shaken of the molesting enemy. And for repulsing horse there is no better meanes for the armed foote, then with the light armed to line that part of the battaile, where the horse shall be about to giue on.*

b Plutarch. in Crasso.

c Plut. in Ant.

d Liu. decad. 4. lib. 1. 16. A. B.

e Hirtius de bell. African.

6 To beat in the light armed] *The* light armed *being nimble and quick, and seeking alwaies aduantages by changing of ground, can neuer be forced by the armed foote, (who are charged with heauie furniture, and by reason thereof can make no speed) to seeke succour in the battaile of their armed. Either they must be beaten in by the horse, or by the contrary light armed, as* Ælian *hath heere. The Horse are commonly to encounter with Horse, and the light-armed with light-armed, amongst whom the greater number preuaileth, their skill, and armes being alike.* For the fight being a farre of, many will sooner wound, or kill a few, then a few many, *saith* [f] Xenophon: *If the fight bee at hand the better armed, or better minded will driue the other out of the field. The* [g] Roman *Horse, and the light-armed, were too hard for the* Macedonians, *and chased them to their Campe. And that happened by reason their armour was fitter to close, and to fight at hand. So our Archers at the battaile of* Cressy *compelled the* Genua *crossebowes to forsake the field, the english bowe being better in vse, then the* Genua *crossebowe. When they haue made the contrary* light armed *to quit their place, they are at liberty themselues to serue, where most aduantage may be had of their seruice.*

f Xenoph. Cyrop. lib. 2. 39. E.

g Liu decad 4. lib. 1. 16. B.

7 To discouer suspected places, and lay ambushes] *Suspected places are such for the most part, as ambushes are laid in. Ambushes are of two kindes, being laid either* to endamage the enemies battell *in the field, or* to hinder, and disapoint his march. *The places, such as are remoued from sight, and had neede of speciall discouery. As woods, mountaines, forrests, rockes, banckes of riuers, caues, hills, hollow, and deepe waies, and the like, The most part of which are rough, and intricate, and scarce passable for the heauy armed, and horse. But the light armed, that are not incumbred with weight of armes, & able quickly to aduance, or retire, are fittest to lie close in such places, or to search if the enemie be lodged there. For the first kinde of Ambushes wee read, that both heauy armed, and horse haue beene imploied. The warres of* Annibal *in* Italy *afford plenty of examples herein. For the other, which is to beset or discouer waies, there are none so fit, as the light armed, whose quicknes, and expedition giueth them aduantage to assault their enemy with their missiue weapons, though the ground be neuer so vnequall, and meanes to view any place suspected without almost any danger of their owne.*

8 For

8 For ſpeedy and farre attempts] *A heauie armed man is not fit for farre or ſuddaine attempts; he is armed for a firme and ſtedfaſt fight, and not for concurſations.* Alexander, *whenſoeuer he was to vſe expedition, tooke with him the horſe and light-armed, leauing the armed to come after.* [a] *So did he, when he oppreſſed* Clytus, *and* Glaucias *in their campe:* [b] *ſo when he poſſeſſed himſelfe of the ſtreights of* Cilicia; [c] *ſo in preuenting of the burning of* Tarſus; [d] *ſo in ſeeking to take the ſtraights of the* Vxians, [e] *and the gates of* Perſia [f] *and the rocke of* Aorne. *The ſame hath beene the manner of other Generalls, as I haue noted in other places. For when Celerity is requiſite, who ſo fit to be imployed, as they who haue nothing to hinder their ſpeede? The Targetiere had but a light target, and a ſpeare; the light armed but their armes. And what are they? bowe, and arrowes, darts, and ſlings, which haue no weight in them.* [g] *Which was the reaſon alſo, that in victory they were imployed in giuing chace to the enemie, that had loſt the field. The armed vſed to follow in good order of battell, the ſlaughter, and execution was deliuered to the light armed, and horſe. Wherein notwithſtanding the counſell of* Iphicrates *was held good;* take heede (*ſaid hee, to his light armed*) of ambuſhes, and ſpare not to preſſe hard vpon the reare of thoſe, that flie, till you come to riuers, or ſtraights, or ditches. For it is dangerous in ſuch places to hinder the enemies flights, leaſt feare turne into deſperation.

a Arrian. lib. 1. 7. D.
b Arrian. lib. 2. 31. E.
c Arrian. lib. 2. 31. F.
d Arrian l. 3. 64 E.
e Arrian. lib. 3. 65. D.
f Arrian. lib. 4. 99.
g Polyen. lib. 3. in Iphicrate § 2.
h Xenoph. de exped. Cyr. lib. 1. 265. B. lib. 7. 416. A. B.

The faſhion of Horſe-battailes: and firſt of the Rhombe, the Wedge, and the Square.

CHAP. XVIII.

THoſe, that haue written before mee, haue diuerſely framed *Horſe-battailes*, ſome of *iuſt ſquares*, ſome longer in *flanke*, then in *front*, ſome like a *Rhombe*, ſome like a *Wedge*, but none of them haue (if I may ſpeake freely) expreſſed fully their owne conceits. Therefore to make all things cleere, and better to bee vnderſtood, I will ſet downe the ſeuerall figures of each ſeuerall kinde.

1 It ſeemeth the *Theſſalians* whoſe power was great in Horſe, were the firſt, that vſed the kinde of battaile 2 faſhioned in forme of a *Rhombe* (the inuention whereof is attributed to *Iaſon*) as fitteſt for all encounters; The *Horſemen* thus ordered being ready to turne their faces euery way with ſpeede, and not eaſie to bee ſurpriſed in *flanke*, or in the *Reare*. Becauſe the beſt men ſtand in the *flanke*, and the Commanders in the *Angles*, as namely the Captaine of the troupe in the front, and in the right, and left *Angles* thoſe, that are called Flanke-commanders, and the Leiutenant in the *Reare-angle*.

3 The *Scythians*, and *Thracians* haue vſed *Wedges*, and likewiſe the *Macedonians* by the ordinance of King *Philip*. For this kinde of battaile was held of mor exact vſe, then the *ſquare*, becauſe the Commanders are placed in a circle; and conſiſting of a narrow front, it maketh readie paſſage thorough any diſtance, and an eaſier wheeling and returning to the firſt *poſture*, as hauing no ſuch troubleſome windings about, as hath the *Square*.

4 The *Perſians*, and *Sicilians*, and moſt *Gracians* made choice of *Squares*, being of opinion they were more eaſie to frame, and fitter for ioint-mouing of the Horſe, and more effectuall in vſe. For they are ſooner in order being digeſted

into files, and rankes, and in this order alone all the Commanders fall vpon, and charge the enemie with one maine force. Thoſe are beſt *Squares*, that double the number of the length to the number of the depth. As when there are eight in length, and foure in depth, or tenne in length, and fiue in depth. Theſe in number are of vnequall ſides, but in figure foure *Square*. For the length of a Horſe from head to taile compared with his bredth requireth more men in rank, then in file [to make vp the *Square*] Some allow thrice as many in length, as in depth, and thinke by that meanes a perfect *ſquare* may be formed: becauſe for the moſt part, the length of a Horſe ſeemeth thrice as much, as the bredth betwixt his ſhoulders. Therefore they giue nine in front, and three in flanke. For a multitude of Horſemen yeeld not the ſame aduantage behinde, that foote doe, when in the depth of the Battaile they iointly thruſt on; in as much as the Horſe helpe nothing to the ſetledneſſe of faſt reſiſtance, being neither able to thruſt thoſe forwards, that are before, nor yet to linke, and knitte with them, and ſo to make one weight, as it were, of the whole body; and in caſe they preſſe vpon the formoſt, by diſordering, and diſtempering their owne Horſe, they annoy themſelues more, then the enemy. Therefore it alwaies falleth out, that when there are as many Horſe in length, as in depth, a Square of number is made, but the ſides of the figure are vnequall, the depth exceeding the length in proportion: but when the figure of the Troupe is Square, the number of the ſides and front, is vnequall.

Notes.

IN the ſecond Chapter of this booke, the armie was diuided into two kindes, footemen, *and* Riders. Footemen *againe into three,* armed, Targetieres, *and* light armed. *Of theſe three is hitherto treated.* Riders *follow, who either vſed* Horſes, *or* Elephants. Horſes *either alone, or elſe in* Chariots. *Of theſe* Ælian *treateth ſeuerally hereafter. For the* arming, *and* place *of* Horſe *in the fielde, hee hath ſufficiently ſpoken already. The following diſcourſe is: Firſt, of the manner of embattailing horſe (wherein he ſetteth downe the diuerſity of vſage in ancient time) Then of Chariots, and laſtly of Elephants.* [a] *That a horſe is a kinde of beaſt, that loues man, and is moſt faithfull vnto him* Pliny *teſtifieth. The vſe of him is for* carriage, *and for* ſeruice in the field. *And in the ſeruice of the field an* armie *without horſe, is in a manner no armie.* Iphicrates (*as I haue ſaid before*) *comparing an armie to a mans body reſembleth the horſe to feete. And as the body hath no power of moouing, or rather remouing, the feete being lame, or taken away. ſo is the armie ſlow, and vnfit for expedition, that is deſtitute of horſe; and may be well reſembled to thoſe beaſts, that creepe vpon their bellies, whoſe greateſt haſt is with little ſpeede. The horſe do great ſeruice in the field of themſelues alone; and are principally imployed in matters that require quickneſſe in diſpatch. Therefore are they fit for diſcoueries, either of the enemies country, or of his campe, or of his marche, or of other things, whereof the Generall deſires to haue notice. And not for diſcoueries alone, but to ſpoile, and deſtroy, whatſoeuer the enemy hath growing, to make prey of his Cattle, burne his houſes, kill his people, ſurpriſe his places of ſtrength, and to embarre him from doing the like to vs; to bring and conuay prouiſion for our Campe, to ſhut in the enemie, that he goe not out his campe for like cauſes, to hinder the enemies march by falling on the reare. Briefely all expeditions of celeritie are for the moſt part deliuered to the horſe alone. Eſpecially as long as they are in ſuch places, as giue them liberty to go on, or retire at their pleaſures. Yet are they often ioyned with the light armed, as I haue ſhewed. They often ioine likewiſe*

[a] Plin natural. hiſtor. lib. 7. cap 56.

likewiſe with the armed. [a] *And if they may come to charge the enemies battaile in the flanke, or reare, at ſuch time, as our* armed *charge in front, they endanger all. But for imployment alone againſt the* armed foote *many examples of former times ſhew, how weake there force is.* [b] *And how little they preuaile (eſpecially againſt armed, that are practized in fight, and reſolute Souldiers) The examples I haue quoted in the margent make the matter cleare. For further confirmation I will ſet downe* Xenophons *opinion, which all be it, it were deliuered concerning the* Perſian *horſe, that came againſt the armed foote of the* Græcians *in their return out of* Perſia, *yet the reaſon ſtretcheth to all horſe in generall. His words ſound thus:* [c] If any of you faint in minde (*ſaid he to the* Græcians) becauſe we haue none, the enemy many horſe, let him conſider, that ten thouſand horſe-men are no more, then ten thouſand men. For no man was euer ſlaine in battaile by byting, or ſtroke of a horſe: Men they are, that performe, whatſoeuer is done in fight. As for vs (the foote he meaneth) our mounting is much more firme, and ſtedfaſt then theirs. They hange vpon their horſe, and are in feare not onely of vs, but to be ſhaken of and throwne to ground. We contrariewiſe haue ſtable footing, and ſhall be able both with great aſſuredneſſe to ſtrik, and direct our aime with more certainty. One aduantage the horſe-men haue, they may more ſecurely runne away. *Hitherto* Xenophon. *And ſo much is ſummarily ſpoken of the ſeruice of horſe.*

a Diod. Sicul. lib. 16. 512. Pol. lib. 3. 266. A. B.
b Hirtius de bell. African. Xenoph. de exped. Cyr. lib. 3. 309. B. Plut. in Anton. Appian in Par. 164.
c Xenoph. de exped. Cyr. lib. 3. 302. B. C.

1 The Theſſalians, whoſe power was great in horſe] *The* Theſſalians *inhabiting about the mountaine* Pelius *were the firſt, that fought on horſe-backe, and were therefore called* Centaures. *When they watered their horſes in the riuer* Peneus, *the horſe heades ſtooping to drinke made the vnskilfull multitude, who ſaw the bodies of men ioyned to the ſhoulders of the horſe, conceiue, that the vpper part was man, and the neither Oxe. For it ſhould ſeeme, horſe were not ſo well knowne then, as Oxen, with which they laboured and plowed their land. The Poets therefore fained, that they were monſters compounded of two diuers natures, man and oxe, or bull; and that* Centaurus, *the beginner of the race was begotten by* Ixion *vpon a cloude, which was figured like* Iuno. *Howbeit* Seruius *giueth a better originall of the name, ſaying,* that certaine ſeruants of a *Theſſalian* King ſeeing their maſters Neate, raging with the *Brimſe* (a flie that biteth cattell) got a horſe backe, and pricking them with goades, reduced them to their ſtables; and that they were after called *Centaures, Para kentein tous taurous,* of pricking the neate. *The great Etymologicon giueth yet an other beginning of the name. For where I haue ſaid that* Centaurus *was begotten by* Ixion *vpon a cloude, which was figured like* Iuno, *with whom* Ixion *was in loue: The Etymologicon ſaith, the ſonne of* Ixion, *and of the cloude was called* Centaurus: Apo tou ton patera autou kentein ten auran. *But* [d] Diodorus Sicul. *reporting the hiſtorie of the* Centaures, *ſpeaketh not of* Centaurus, *the father of the race but ſaith notwithſtanding,* that they were bred of a cloude, and that the Nymphs brought them vp, and that they were the firſt horſemen, and therefore called *Hippocentauri* which gaue occaſion to the fable, that they had two natures. *It is generally agreed, that theſe* Centaures *were* Theſſalians, *and that they were the firſt horſemen, that are mentioned in any hiſtory. And as they were the firſt, ſo by reaſon of their long practiſe* [e] *they were accounted the beſt, the moſt valiant, and the moſt expert horſe-men of all* Greece, *euen to the time of* Philip, *ſonne of* Amintas *King of* Macedonia, who conquered all *Theſſaly* (*ſaith* [f] Iuſtin) not of deſire to make himſelfe rich of the prey of that Countrey, but to winne to his armie the ſtrength of the *Theſſalian* horſemen. Whoſe ſeruice he vſed afterward in all his war. *Neither did they leſſe ſeruice to his ſonne* [g] Alexander, *in whoſe greateſt battailes their vertue clearelie appeareth, and is eſpecially commended by hiſtories.* [h] Pyr-

d Diod. Sicul. lib. 4. 189.
e Xenoph. hiſt. Græc. lib. 7. 644. D.
f Iuſt. lib. 7. 633. C.
g Diod. Sicul. lib. 17. 573. & 594. Plutarch. in Alexand.
h Plut. in Pyrrh.

rhus *alſo, principally by their valor, put the* Romans *to flight.* [e] Ageſilaus *returning out of* Aſia *towards his Countrey led his armie through* Theſſalie, *and being much incumbred in his march by the* Theſſalian *horſemen, that were his enemies, hee charged them and ouerthrewe them, and pleaſed himſelfe maruellouſly therein,* becauſe with troupes of horſe, which himſelfe had raiſed, and diſciplined, hee had ouerthrowne the *Theſſalians,* that were (*ſaith* Xenophon) ſo highly renowned for horſemanſhip.

e Plutarch. in Ageſilao. Xenoph. Hiſt. græc lib 4. 518. A.

2 Faſhioned and forme of a Rhombe] *There are three kindes of horſe battailes mentioned by* Ælian, *the Rhombe, the Wedge, and the Square. And the ſquare is either a iuſt, ſquare, or longer in flanke then in front, or in front then in flanke. The Rhombe was the inuention of the* Theſſalians, *and in that forme they vſually fought. But where he maketh* Iaſon *to be the inuentor of it, he afterward expoundeth his owne meaning, attributing the inuention to* Ileon *the* Theſſalian *(from whom alſo it was tearmed* Ile*) but the chiefe practiſe to* Iaſon. Euclyde *defineth a Rhombe in this ſort:*

b Euclyd. lib. 1. definit. 31.

[f] *A Rhombe is a ſquare figure, that hath the ſides equall, but the angles not right. That is, the foure ſides of the ſquare are of one, and the ſame length, but the points, which make the angles, are two of them ſtretched out in greater length, and become more ſharpe, two of them brought narrower together, and made more blunt, then the right angles of a* Tetragonall *ſquare. See the figure. It is the ſame figure in a battaile, that at this day we call the* Diamond *battaile, which is ſometimes practiſed amongſt the foote for ſhew, and exerciſe ſake, but amongſt the horſe I haue not ſeene it practiſed. And as the ſquare goeth to charge with all the ſouldiers, that ſtand in one of the ſides, that is with the front, (for the front is but a ſide of the ſquare) ſo the Rhombe chargeth with one of the points, which is the front of the Rhombe. Whether of them is of moſt vſe in the field, I am not to determine. For the ſquare ſtandes the practiſe of our daies, beſides the vſage of the* Perſians, Sicilians, *and moſt* Græcians, *as* Ælian *ſaith. For the Rhombe the* Theſſalians *alone (which notwithſtanding were acknowledged the beſt horſemen of* Greece*) vnleſſe we allow the Wedge for a parcell of the Rhombe, (a Rhombe being but a double Wedge, as making two wedges, when it is diuided in two) and then haue wee for the Rhombe not onely the* Scythians, *and* Thracians *(both nations very good Horſemen) but King* Philip Amintas *ſonne, and* Alexander *the great, and his ſucceſſours. Either of both formes haue their reaſons. For the ſquares they, that vſe them, held opinion (as* Ælian *ſaith) that they were eaſier to frame, and fitter for ioint mouing of horſe, and ſooner in order of file, and ranke, and that the Commanders iointly charged the enemy, which in no other forme could be done. For the eaſineſſe to frame I ſee no great difference, onely cuſtome, and vſe, muſt in euery forme, yea in the ſquares themſelues make the horſeman ready to know, and take, and keepe his place. The ſame may be ſaid for the ioint mouing of the horſe. Now to file and rancke is common to the ſquare with ſome Rhombes, and as ſoone done in the one, as in the other, the number of the troupe being once knowne, and euery horſeman hauing his place aſſigned, and the forme reſolued vpon, into the which it muſt be caſt. For where there are 4 kinds of Rhombes, one, that fileth, and ranketh; another, that fileth, but ranketh not; the third, that ranketh, but fileth not; the laſt that neither fileth, nor ranketh (as* Ælian *teacheth in the next Chapter) The firſt will finde no more difficultie, of filing, and ranking, then the ſquare, the two next albeit the one ranke not, the other file not, yet the want of filing, or ranking hindereth no more the readineſſe of framing them, then the vſe of filing, and ranking helpeth the other. The fourth is rather curious then profitable, as I take, neither doe I finde example of it. And it may bee truly affirmed of it, that the ſquare is much eaſier to be faſhioned. We ſhall haue occaſion to ſpeake of the laſt three in due place. Touching the ioint falling on of the Commanders, I confeſſe the aduantage is great. For when the beſt men (ſuch as the Commanders ought*

to

to be) altogether fall vpon the enemy, they are very like to put hard to them. And as it is a great part of skill to bring many hands to fight, so is it no lesse, to bring the best hands to fight. Many hands make light worke, the best hands sure worke. Now for the Rhombe Ælian alledgeth these reasons. First, that it is fittest for all encounters, because the horsemen are ready to turne their faces euery way with speed. Then, that they cannot be surprised in flanke, or reare, hauing the best men in their flanks, and the Commanders in euery point of the Rhombe. And cannot the square turne faces euery way? They can, but not with the same aduantage. For the Rhombe, which way soeuer faces are turned, remaineth in the first forme. And whether it be to the right, or left flanke, or to the reare, it keepeth still 4 euen sides, and the men of most seruice in the sides. Besides that one point alwaies affronteth the enemy. Not vnlike a Calthrop, which howsoeuer you cast it to the ground, hath one point bearing right vp to wound the horses feet: But the square in turning faces to either flanke altereth the forme of the front. In a broad square, the front at the first was longer than the sides, faces being turned to either flanke the sides become longer, than the front; contrariwise in the Herse battaile. Besides in such turning of faces the square leeseth the aduantage of embattailing, the Commanders, that stood in the front, standing now in one of the flanks, and being not able to charge the enemy iointly, (the greatest aduantage of that forme) and so the front being without Commanders, is subiect, and in danger of surprise, where the Rhombe, which way soeuer faces turne, hath as many Commanders in the front, as at first. But let vs take the horse square in full strength with all Commanders in front; whether shall that forme be better, than the Rhombe? I dare not affirme it. For where there are two kindes of fight; One with maine force, the other with sleight, and Art; in the first I will preferre the square, in the last the Rhombe. The square for slaughter and violent ouerthrowing, the Rhombe for piercing, and artificiall breaking the enemies battaile, which last amongst great Commanders hath alwaies beene accounted the best kinde of winning. In the square all the Commanders fall iointly vpon the enemy, and because they are supposed to be the cheife of the Army, in all likelyhood they will ouerthrow the formost, and slay many. Yet by reason of the length of their front, they sticke man to man, and can make no farre entrance, and the victorie hangeth doubtfull, till they haue slaine the most of them, that resist, and so make the rest to flie. The Rhombe contrary-wise, being narrow, and pointed in the front, first forceth a passage with the point, which maketh way to the rest that follow, and then without great labour piercing further, and further, breaketh the aduerse battaile, & disperseth, and putteth them to flight, and after doth execution at pleasure. Neither can I make a fitter resemblance, then by comparing the 2 figures, one to an axe, the other to a wedge, both instruments vsed for dividing solid masses of wood. For the axe, albeit sharper, than the wedge, yet hauing the edge drawen out in length, can not by any strength be driuen farre into the wood, but by doubling many stroaks, and by much labour commeth at last to diuide it. The wedge contrary-wise, though not so sharpe, being once entred, insinuateth it selfe more by litle, and litle with the narrownes of the point, and maintayning the hold it first got, at last forceth it asunder, though it be neuer so tough. So is it in the square, and Rhombe: whereof the square beginneth, and endeth with violence; the other vseth first cunning, and mildenes, as it were, to enter: being once entred renteth a peeces, and disparteth all that standeth in the way. The manner of our times alloweth not of Rhombes; Experience of former times highly prized them. I will insist vpon the Thessalians alone, who are accounted the inventers of the Rhombe, & fought alwaies Rhombe-wise. Polybius had seene their seruice, and beene Generall of the Horse in his owne country, and therefore able to iudge. He giueth this censure of them; [a] that in troupes, and being imbattailed,

[a] Polyb. lib. 4. 178. B. C.

led, they could not be resisted: to fight man to man in single combat, they had neither will, nor courage. *What then should be the reason, they should be so powerfull in troupes? No other, then the forme of their imbattailing, which forme was the* Rhombe *here mentioned by* Ælian. *In this forme they commonly beat the* Græcian, *and* Persian squares, *and gat the reputation of the best horsemen of* Europe.

3 The Scythians and Thracians vsed the wedge] *The* Rhombe *is of* 4 *sides, the* wedge *but of three: and halfe a* Rhombe *maketh a* wedge, *as will be shewed in the next Chapter. The* wedge *was vsed by the* Scythians, *and* Thracians, *and whether* King Philip *of* Macedonia *borrowed it of them, I am vncertaine. But I rather incline to thinke, that his* Theban Master *taught him as well the* wedge, *as other formes of battailes. The cause of my coniecture is, for that I finde that his* [b] *fellow scholer* Epaminondas *beat the* Lacedemonian horse *at* Mantinæa *in that forme.* [c] Xenophon *recounteth the storie to this effect*: The enemy *(they were the Lacedemonians)* ordered their horse like a Phalange of armed in depth, without mingling foote with them: But *Epaminondas* made a strong wedge of horse also *(for before he tells the* Theban armed *were cast into a wedge)* and ioyned some foote with them, conceiuing after he had cut in peeces the horse, he should not misse of ouercomming the other forces of the enemy. And so going to charge he was not deceiued of his hope. *Thus Xenophon. Of ioyning horse and light armed together, I haue spoken before: And that they were* light-armed, *that* Epaminondas *ioyned to his horse,* [d] Diodorus Siculus *sheweth. By* Xenophon *then it is plaine, that not onely the* Scythians, *and* Thracians, *but the* Græcians *also, when they thought it conuenient, vsed the* horse-wedge, *and that* Epaminondas *ordered both foote, and horse in a* wedge. *And considering* King Philip *was brought vp in* Epaminondas *his Fathers house, and made partaker of the learning wherewith* Epaminondas *was instituted; it is like in erecting a new military discipline amongst the* Macedonians, *as he tooke many other things from the* Græcians, *so he borrowed this forme, hauing first seene the notable effect thereof at* Mantinæa.

b Diodor. Sic: lib. 16. 510.
c Xenoph. hist. Græ. lib. 7. 646. B.
d Diod. Sicul. lib. 15. pag 502.

Now Ælian *bringeth reasons, why the* wedge *was holden better than the* square. *Let me with leaue adde a word or two why I take it to be better than the* Rhombe. *And first it cannot be denied, that the* wedge *hauing the same manner of disposition that the* Rhombe *hath, that is a front ending in a point, where the* Captaine *standeth; two points of the two flanks, where the* flanke-commander *stands, the* Lieutenant *in the reare, and the best men in the flanks, but it must be as powerfull to open the enemies battaile, as the* Rhombe *is. Then it hath this aduantage of the* Rhombe *that it bringeth more hands to fight. For let the* Rhombe *and* wedge *be framed of an equall number, the* wedge *in figure resembling the forepart of the* Rhombe *must haue the horse, that should be ranged in the reare of the* Rhombe, *orderly couched within the* 3 *sides thereof: where by both the number of the horse in the sides is increased, and the bulke of the body betwixt flanke and flanke inlarged. And seing both the* Rhombe *and the* wedge *goe to the charge with the point of their front, the* wedge *both hath the property to pierce, and enter the enemies battaile by art, and sleight, as well as the* Rhombe, *and doth it with more strength, because of the great number of hands in the sides, which all come to fight. Ioyne, that the hinder part of the* Rhombe *serueth onely to auoide surprizes, and worketh nothing in charging. For after the two flanke points are entred, the rest of the* Rhombe *growing narrower, and narrower toward the Reare, falleth further off from the enemy, and is content onely to follow the way, that was made to hand by the front, and flanks; without being able to strike a stroke; especially if it preserue the order it ought to keepe: whereas all parts of the* wedge *are effectuall, the* point *to enter, the* sides *euen to the* flanke corners,

where

where the Reare endeth, to dispart and disseuer; and finally to disorder the enemy, whereby the victorie ensueth. And if we may rely vpon authority, the authority of King Philip *will sway much for the* wedge. *For vnlesse he had held it better than the* Rhombe, *hee would not haue chosen, nor accustomed his* Macedonians *to it, nor* Alexander *after reteined it, if he had not beene of the same opinion. Neither aid the euent deceiue them: for almost in all battailes their horse thus disposed caried away the victorie. But, as I before noted, neither* Rhombe, *nor* wedge *haue found grace in the eyes of the great Generalls of our daies, nor can we tell what to insist vpon, till experience hath taught, how well these formes will agree with the weapons, and seruice of our moderne warres.*

4 The Persians made choice of squares] *The* square *is the third, and last forme of horse-battaile that* Ælian *mentioneth; whereof there are three kinds; one with a larger front, then flanke; an other with a larger flanke then front; the third, with front, and flanke equall. All these three were vsed amongst the* Persians, *and* Græcians. *For two of the first,* Xenophon *may witnes. When* Agesilaus, *after* Tissaphernes (*the King of* Persia's Lieutenant *in part of the lesser* Asia) *had broken truce with him, made an incursion into* Phrigia, [h] Xenophon *telleth, that* the rest of his iourney was without impediment, till he came not farre from *Dascylium*. There when his horsemen galloped to a hill to discouer the country, by chance the horsemen of *Pharnabazus (an other of the King of Persians Lieutenants)* being about the same number that the Græcians were, and sent by *Pharnabazus* vnder the command of *Rathynes*, and *Bancæus* his bastard brother, galloped vp the same hill, and discouering one the other no further of, than two parts of a furlong, at the first they stood still; the Græcians ordered Phalange-wise 4 in depth, the Barbarians making their front 12 in length, the depth many more. Afterward the Barbarians began first to charge. when they came to hands, all the Græcians that ioyned, broke their staues. The Persians hauing *Corneil* darts killed some 12 horsemen, and 2 horses. Herevpon the Græcians fled. But when *Agesilaus* came with the Armie to the reskew, the Barbarians againe forsooke the field. *The* Persians *then vsed a* square *longer in flanke, then front: The* Grecian *a* square *longer in front, then flanke. But which of the three squares is most to be esteemed* Ælian *sheweth in the words following, saying those squares are best, that*

h Xenoph. Hist. græc lib. 3. 498. D.

5 Double the number of the length, to the number of the depth] *What the length, and depth in a battaile are, we haue seene before. Yet to vnderstand* Ælian *the better, let vs repeat, that the length of a battaile is the* extension *of the* front; *the depth the* extension *of the* flanke. *To double then the number of the length to the number of the depth, is to place twise so many men in front, as in flanke. As for the purpose, 6 in front, 3 in flanke; or 8 in front, 4 in flanke; or 10 in front, 5 in flanke. And that this was the manner of the* Lacedemonians *appeareth by the* [i] Oulamos, *or horse-troupe instituted by* Lycurgus, *which was figured* Tetragonally *with 4 equall sides, and conteined in it 50 horse. Now that it could not be a square of number, that is, to haue as many horse in flanke; as in front may hereby be shewed, because no square number will make 50. The nearest is 7 times 7, which amounts to 49. But proportioning the number of the length double to the number of the depth, that is 10 in front, and 5 in flanke, euen 50 will arise. So that the horse troope of the* Lacedemonians *had the number of the length double to the number of the depth, and made a square in the equality of measure of the sides, not in number, which is the* Tetragonall *figure, whereof* Plutarch *speaketh. And where* Xenophon *(as I haue alledged before) reporteth that the horsemen of* Agesilaus *were but 4 in depth, it hindereth not this truth. For, as I noted before, the ordinary aray of the* Lacedemonians *foote was 8 in depth. Yet did* Pausanias *the Lacedemonian King*

i Plutarch. in Lycurgo.

King caſt his men into a deepe Phalange againſt Thraſibulus. *Other examples I haue alledged in the ſame place touching the ſame matter. Beſides this appeareth to be but a* tumultuous *fight either of the parties comming ſoddainely in the ſight of the other, and going preſently to charge, before they could haue time to alter the order they then were in. And to ſay the horſe troupe of the* Lacedemonians *ought to haue beene but 4 in depth, it muſt thereof neceſſarily follow that they were 12 in length, which yet will come ſhort of* 50: *4 times 12 makes but* 48. *Indeed* [k] Leo *holdeth opinion, that in a horſe battaile, the depth ought to be no more than* 4. *I will ſet downe his words as neare, as conveniently I can engliſh them.* The depth, *ſaith he*, or thicknes, as it was of ancient time limited, is ſufficient, if it be of 4 horſe in euery troupe; becauſe in horſe a greater depth will be idle, and to no purpoſe. For they cannot, as foote doe with their thicknes, thruſt one an other forward from behind; and ſo the formoſt, will they, or nill they, are forced to goe againſt the enemy. And this is done amongſt foote. But the horſe can not thruſt forward thoſe, that are before them, nor the *file-leaders* that ſtand in front, be ſeconded in that kinde by the reſt, that ſtand in depth after the fourth man. For if they be *Lancers*, the fift ranke cannot reach with their launces to the front. If Archers, they ſhall be faine to ſhoot aloft for feare of hurting their companions before; and ſo their arrowes ſerue for no vſe, after fight is ioyned. Therefore is the number of 4 ſufficient in depth, as I haue ſaid. *This was the opinion of* Leo. *To which I cannot abſolutely aſſent; vnleſſe he had giuen* 8 *for the front of his troupe, and ſo made it of* 4 *equall ſides in figure, not in number, as* Ælian *requireth to be done in the beſt ſquares. For the reaſon of launces not reaching to the front in the fift ranke, reacheth not home to the reaſon of warre.* Ælian *before hath declared, that the pikes of the ſeuenth ranke reach not to the front of the Phalange. Yet no man will thereof inferre, that the Phalange ought to be but* 6 *deepe. Yea but the foote that come after, helpe the formoſt, ſeconding them, and thruſting them on with the weight of their bodies, which the horſe can not doe. This muſt be granted to be an aduantage, that foote haue aboue horſe in depth. Yet are there other reaſons alſo of giuing depth to a Phalange: In the order whereof two conſiderations concurre; one of offence, the other of defence. The reaching of pikes or horſemens ſtaues ouer the front is good for offence, that is to annoy the enemy in the ſhocke: likewiſe the thruſting on of thoſe that come behind, ſerueth with the violence to make them giue ground. A reaſonable depth is for defence, in as much as it defendeth a* Phalange *againſt the indeuour of the enemy to breake it a ſunder. And as it is a fault to make it too deepe, ſo is it likewiſe a fault to make it too ſhallow. Too much depth narroweth the front, and giueth eaſie meanes to the enemy to incompaſſe, and ouer-front it.* [l] *Too much ſhallowneſſe on the contrary ſide maketh it weake, and ready to be broken, and diſſeuered by the enemy, and giueth a paſſage thorough, and meanes not onely to incompaſſe the front, but at the ſame inſtant alſo to aſſault it behind, and ſo vtterly to defeat it. So that the reaſons of* Leo *reach not home, as I ſaid, there being other cauſes of thickning a horſe troupe beſides reaching of* Launces *to the front, and ioint thruſting on of the horſe comming behinde. And where* Leo *ſpeaketh but of 4 horſe in depth of a troupe,* Polybius *ſaith plainely that being ordered for fight, they had for the moſt part* 8 *in depth;* Polybius *a man which liued in the times, whereof* Leo *ſpeaketh, and had beene Generall of the horſe of the* Achæans. *Beſides* Leo *ſeemeth not a little to differ from himſelfe.* [m] *For in his ſeuenth Chapter, he writeth after this manner:* If there be many horſe (that is aboue twelue thouſand) let the depth be of 10. If but few, let it be no more than 5. *In ſquares therefore I hold* Ælians *proportion beſt, to double the number of the front, to the number of the flanke; and as the number of the troupe ariſeth (for horſe troupes are not alwaies of one number) to inlarge the length of the*

k Leo cap. 12. §. 40.

l Leo cap. 14. §. 108. 109.

m Leo cap 7. §. 81. & cap. 14. §. 70.

the front, and the depth of the flanke proportionably one to an other.

6 When there are as many horſe in length as in depth] *I noted before in the ninth Chapter, that there were two ſquares of equall ſides, the one of number, the other of figure; which two ſquares differ in this, that the one maketh vnequall ſides in the ſhape of the battaile, the other equall. The firſt at this day, we call a ſquare of men, the other a ſquare of ground. When the number of the ſides is equall in length, and depth, it giueth but halfe ſo much ground in front, as in flanke. Each ſouldier, if it be a foote battaile, occupying a foote, and a halfe of ground in front, when he goeth to charge, where in flanke he muſt haue 3 foote. And in a horſe troupe 3 foote in front, and double, or (as ſome ſay) treble as much in flanke. And ſo are the ſides vnequall. The euen length of flanke and front giueth a like ground to both, and maketh the ſides of the figure equall, but the number of the front double to the number of the flanke, whether it be in horſe or foote. In foote, becauſe the ſouldiers in Ranke haue but halfe ſo much diſtance, as they haue in file; In ranke a foote and a halfe, in file three foote. In horſe, becauſe the length of the horſe is much more, than his breadth, and that length is fully ſtretched out in flanke, the bredth onely in front.*

Why Rhombes were firſt brought into vſe, and the diuers formes of them.

Chap. XIX.

The forme of the *Rhombe* ſeemeth to haue beene taken vp for the neceſſarie vſe thereof. For the *Captaine* poſſeſſing the firſt place, the next following *Horſemen* are not to *ranke* with him, but to come a litle after on both ſides; ſo that [1] the heads of their *Horſes* may reach to his horſe ſhoulders, & on the right, & left hand, and behind, they ought to keepe good diſtances that too much thronging and cluſtering together, breed not diſorder, whileſt ſome horſes being by nature ſullen fall a flinging oftentimes, and foule with other; and conſidering the beaſt is ſomewhat long of body, that in turning about he wound not the horſemen, that are in fight, whileſt with his heeles he aymeth at the Horſes next vnto him.

They that faſhion *Horſe* into *Rhombes*, ſo faſhion them, that ſome *Rhombes file*, and *ranke*; ſome neither *file*, nor *ranke*; otherſome *file*, but *ranke* not; other *ranke*, but *file* not: euery particular whereof ſtandeth thus.

They that would haue [2] a *Rhombe* both *file* and *ranke* make the greateſt *ranke* being the middlemoſt of an vneuen number, as of 11, or 13, or 15. To which they ioyne other *rankes* before, and behind, euery one conteyning two leſſe than the former; as if the greateſt *ranke* conſiſt of 15, the next *rankes* on either ſide are to haue but 13, the next on either ſide of theſe 11. and ſo euery one two leſſe, till at laſt you come to 1. And the whole *Troope* is to conſiſt of 113 horſe.

3 The halfe *Rhombe* is called a *wedge* being faſhioned three ſquare; ſo that the forme thereof appeareth in the *Rhombe*.

Other haue formed the *Rhombe* ſo, that the [4] Horſemen embattailed in that forme, neither *file*, nor *ranke*, conceiuing that turnings and other motions will be more eaſily performed in this figure, nothing hindering before, behind, or in flanke. And firſt they place the *Leader*; then one at his right, and an other at his left hand, ſo diſtant, that their Horſes heads reach vp to his Horſes ſhoulders, as

is

is ſaid before. And the firſt row they make of an vneuen number (as 11). The *Leader* of the *Troope* ſtanding in the middeſt, and 5 other being laid to him backwardly on either ſide; ſo that this *Ranke* conteineth two ſides of the *Rhombe*. Then the *reare-Commander* is placed directly behind the *Leader*, and to him are other ioyned forwardly on either ſide, and the number of euery following ranke after the firſt, is to be two leſſe than the former, and therefore 4 muſt be added on either ſide to the *reare-Commander*, and the number of the ſecond ranke be 9. This ranke maketh two ſides *Parallel* to the two former ſides of the *Rhombe*. The third muſt be 7, and ſo forward to one. The whole *Troope* hath in it 36 Horſe. [5] *Polybius* expreſſeth the forme by the Greeke letter Δ. and maketh it to conſiſt of 64 men.

Other *Rhombes* there are which [6] *file*, but *ranke* not, and are faſhioned thus: They make a file of any number, the Captaine of the *Troope* being *File-leader*, and the *Reare-Commander* the laſt of the file. To both the *flankes* of this *file*, they lay two other *files*, either of them one leſſe in number, than the firſt. Theſe they begin to place, euen with the middeſt of the diſtances of the firſt file on both ſides, as if there were 10 in the firſt file, the next files on either ſide ſhould haue 9 a peece, and the next after them 8 a peece, and ſtill one leſſe in all the reſt after-comming-files, and ſo it will fall out, that the Horſemen ſhall *file*, but not *ranke*. This forme is profitable for turning of faces, when need is, from one point of the *Rhombe* to another. [7] Turning to the right hand is called turning to the *ſtaffe*. Turning to the left hand is called turning to the *Raines*. But if a *Troope* be [8] to *ranke*, and not to *file*, it muſt be ordered thus: The middle and greateſt *ranke* is to be made of an vneuen number, and the reſt of the *rankes* on both ſides, laid euen with the diſtances of this *ranke*, as was done in the *filing troope*. So ſhall you haue a *Troope* that *ranketh*, but *fileth* not.

Notes.

THE former Chapter had a generall diuiſion of Horſe battailes into Rhombes, wedges, *and* ſquares; *this comprehendeth the ſundry figures of* Rhombes, *and the manner of framing them.* Rhombes *therefore are of* 4 *kindes, ſome filing, and ranking; ſome filing, not ranking; ſome ranking, not filing; ſome neither filing, nor ranking.*

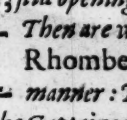
1 The heads of the horſes reach to the heades of his ſhoulders] Ælian *ſaith, that in a* Rhombe *the* Captaine *ſtandeth firſt, and the heads of the next horſe reach to his horſe ſhoulders. This rule, if it be taken generally, and meant of all* Rhombes, *will deceiue vs; if for two kinde of* Rhombs *alone, there is nothing more true. The* Rhombe *neither filing, nor ranking; and the* Rhombe *filing, not ranking, haue the followers horſes heads aduanced to the ſhoulders of them, that ſtand before. But the* Rhombe *filing and ranking, and the other ranking not filing, come wholy behind the horſe of the* Captaine, *as the figure ſhewes, and will appeare in the verball deſcription of the* Rhombe.

2 A Rhombe both to file and ranke] *To make a* Rhombe *both file and ranke, choice muſt firſt be had of an vneuen number for the ranke the middeſt of the Troupe, where the manner is to begin the* Rhombe; *which number muſt neither be too great, leaſt the Troupe grow alſo too great, nor too litle, leſt there be in it no ſtrength.* Ælian *giues a* 11, 13, *or* 15 *for that ranke, and willeth vs to begin the frame by placing firſt the middle ranke, to which the other rankes are to be ioyned on both ſides, the middle men againſt*

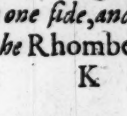
againſt the middle man of the firſt ranke in a right line of file, and the reſt in like ſort, euery Ranke ſtill decreaſing 2 men, till at laſt in the front, and reare-angle you come to one. The figure of this kinde of Rhombe *I haue placed in the præcedent Chapter; wherein the middle ranke is of* 11, *and the whole troupe of* 61, *and the horſe heads of thoſe that follow reach not to the former horſes ſhoulders.*

3 The halfe Rhombe is called a wedge] *I haue ſpoken of* wedges *before, but nothing of the framing of them.* Ælian *here ſheweth how they are framed, when he ſaith, that the forme of them appeareth in the* Rhombe, *and that the haufe* Rhombe *is a* wedge. *For as in a* Rhombe *filing, and ranking, you begin with placing the middle ranke firſt, and ſo proceed adding on both ſides ranke to ranke, till you come to one man in the front: So muſt you proceede in a* wedge, *ſauing that to the firſt, and greateſt ranke you ioyne the reſt onely on the one ſide, abating ſtill in euery ranke 2 men, till you come to the point of the front, where the Captaine ſtandeth alone. And this was the ordinarie horſe troupe amongſt the Macedonians, and is deſcribed in the next Chapter.*

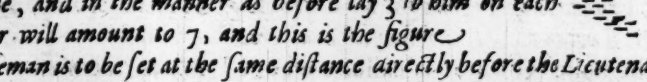
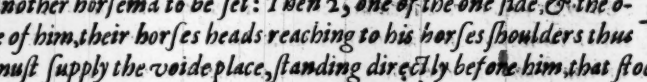
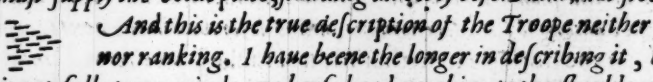
4 That the horſemen neither file nor ranke] *The ſecond kinde of* Rhombe *ſpecified here by* Ælian *is directly oppoſite to the firſt. The firſt both filed, and ranked, this neither fileth, nor ranketh; and is that kinde, which I noted in the laſt Chapter, to haue more curioſitie, than vſe. For the reſt, what is more eaſie to frame, than they? In which either files, or rankes are laid together; or files alone, or ranks alone. And out of that ioyning both in the inward parts of the* Rhombe, *and the outward (that is the flanks) ariſe, and are without difficulty figured. In this you muſt firſt begin with the outſides, and make two front lines, or ſides of the* Rhombe; *and after adde as many to the Reare. And then when the 4 ſides are framed, and haue their place, patch vp by peece-meale the reſt of the body within. Wherein if there be not very large diſtances left betwixt horſe, and horſe, eſpecially euery one being laid head to ſhoulder to an other, it is not poſſible to conuey ſo many horſes within the foure ſides, as will make vp the full* Rhombe. *And yet make it vp as you will, the trouble is more, than in the reſt of the* Rhombes. *And for the vſe, I ſee not how it can be greater, than in the reſt, whatſoeuer is alledged for turnings, and other motions. And the more I thinke vpon it, the more I am induced to thinke, that it was the inuention of ſome Tacticke maſter (of whom were great plenty amongſt the* Græcians) *who ſeeing that ſome* Rhombes *filed, and ranked not; other ranked, but filed not; other both ranked, and filed, and that the two firſt were oppoſite the one againſt the other, would needs bring in a fourth, neither filing, nor ranking, to make an oppoſition likewiſe againſt the third. But becauſe this kinde alſo is ſpecified by* Ælian, *let vs ſee how it is to be framed.* Ælian *for examples ſake would haue the Troope to conſiſt of* 36 *horſe. To put theſe* 36 *horſe in a forme, that ſhall neither file nor ranke, we are thus to worke. Firſt, we muſt begin with the two front ſides of the* Rhombe, *and make them of* 11 *horſe, placing them thus: The Leader and Captaine in the point; next him backwardly on each ſide a horſeman, his horſe head reaching to the ſhoulders of the Captaines horſe; then on the outward ſide of each of theſe a Horſeman, and their horſes heads muſt likewiſe reach to the ſhoulders of the next horſes before. So muſt you goe on, till you haue in like manner beſtowed 2 a peece more on each ſide, ſtill opening the two ſides of the* Rhombe *proportionally. Thus done you haue two ſides of the* Rhombe *which will be in this forme.*



Then are we to faſhion the two Reare ſides of the Rhombe *of* 9 *horſe, placing them after this manner: The Lieutenant in the Reare angle, directly oppoſite to, & yet looking toward the Captaine; on either ſide of him forward toward the front 2 Horſemen, their horſes ſhoulders lying euen with the head of the Lieutenants horſe. And after them the other* 6; 3 *on one ſide, and* 3 *on the other in the ſame proportiõ. And ſo haue we the other two ſides of the* Rhombe *in this forme.*



which being ioyned

ioyned to the former make the 4 sides of the Rhombe; In the framing whereof 20 of the 36 horse are bestowed. There remaine 16, which are thus to be ordered: Within the Rhombe we must at reasonable distance place a horseman behind the Captaine in aright line, and in the manner as before lay 3 to him on each side. The number will amount to 7, and this is the figure 
Then another horseman is to be set at the same distance directly before the Lieutenant, and on ech side of him two other toward the front, And these 12 horse ioyned together, will fashion out a lesser Rhombe, comprehended within the sides of the first. So are 32 horse disposed of. The 4 that are left are thus to be ordered. In a right line againe after the Captaine, and at the former distance is another horsemā to be set: Then 2, one of the one side, & the other of th' other side of him, their horses heads reaching to his horses shoulders thus 
The horseman left must supply the voide place, standing directly before him, that stood next before the Lieutenant thus  And this is the true description of the Troope neither filing, nor ranking. I haue beene the longer in describing it, because the figure grauen is not fully to my minde, no horse head reaching to the shoulders of the horse, that standeth before him.

5 Polybius maketh it to consist of 64 men] Ælian tooke the number of 36 horse to frame this Rhombe, Polybius requireth 64. The number is not materiall, so the forme be obserued. If you make it of 64, you are to take 15 horse for the 2 front sides, and 13 for the 2 reare sides, and so in euery ranke within to diminish 2, as you did in the former.

6 Which file, but ranke not] The third kinde of Rhombe fileth, but ranketh not. It is easie to frame. Take what number of horse you please, and make a file; then lay to the distances betwixt horse, and horse of that file on each flanke two other files, each file conteyning one lesse in number, than the first. And the heads of the files are to be laid right against the space which is betwixt the Captaine, and his follower, and the rest of the horses against the other spaces successiuely. In all the paires of files, that follow, and are laid to the flanks, you must still diminish a horse a peece, till you come to the points, which haue but one either of them. And of this abatement of one in euery file, both front, and reare, and flankes grow into points, and make a Rhombe: As of the euen number in euery file, a square battaile would arise. See the figure. This was the forme the Thessalians fought in, as appeareth by [t] Ælian.

t after cap. 46.

7 Turning to the right hand] The turnings of horsemen and footmen to the right, and left hand, are not termed by the same names. And the difference commeth of the diuersitie of weapons caried on the right, or left side. The horseman in his right hand held his staffe, in the left the raines of his bridle. The armed-foote in his right hand his pike, on the left shoulder his Target. Hence was it, that when the horseman was commanded [u] to turne to the right hand, they bid him turne to his staffe; the footeman to his pike. When to the left hand, they bid the horseman turne to the Raines, the footman to the Target.

u Polyen. lib. 4. 217. 21.

8 To ranke, and not to file] This is the last kinde of Rhombe, and it ranketh, but fileth not. It is made by a contrary way to the former. The filing Rhombe began at the front point, & reare-point, & proceeded to the flanks. This beginneth at the flanke points, & proceedeth to the front and reare. First therefore a ranke is to be laid of what number you list. Ælian would haue it of an vneuen number; but it will fall out as well in an euen number, as the figure sheweth. To the distances of this ranke you must lay 2 ranks more, one on either side, whose number must be one lesse a peece, than the former ranke. Thus continue laying ranks still toward the front, and reare, and in euery paire of ranks diminish one a peece, till you come to the points, either of which haue but one, namely the Captaine, & the Lieutenant, and the Rhombe will ranke, and not file.

CHAP. XX.

The place of Horſemen in the field, the number of an vſuall horſe troupe, the degrees, and names of the officers of the Horſe in generall.

CHAP. XX.

THE Troopes of Horſe, as the light-armed, are placed ſometime before the *Phalange*, ſometime on the right, or left hand in *flanke* of the *Phalange*, ſometime behind the light-armed in the *Reare*. For our purpoſe, let them be placed in the *Reare*, and [1] let the firſt Troope be of 64 men, and the firſt ranke thereof 15 Horſe The next 13. The next 11; and in all the reſt abate 2, till you come to the laſt, which is one.

[2] He ſhall carry the *Cornet*, that ſtandeth in the ſecond ranke next the *Ranke-Commander* on the left hand. All the Troopes ſhall be 64 in number. The horſemen in all 4096. [3] Two Troopes are called an *Epilarchy* of 128 horſe. Two *Epilarchies* [4] a *Tarentinarchy* of 256 horſe. Two *Tarentinarchies* [5] an *Hipparchy* of 512. Two *Hipparchies* [6] an *Ephipparchy* of 1024 horſe. Two *Ephipparchies* [7] a *Telos* of 2048 horſe. Two *Telos* make [8] an *Epitagma* of 4096 horſe.

Notes.

HItherto of ſquares *and* Rhombes, *vſuall horſe battailes amongſt the* Græcians. *Now followeth the horſe battaile of the* Macedonians, *of which* [9] Ælian *hath thus afterward*: This forme of horſe battaile is called a *wedge* by Tacticks, and it was invented by *Philip* King of *Macedonia*, who placed his beſt men before, that by them the weaker might be held in, and inabled to the charge. *As in a ſpeare, or ſword, the point whereof, by reaſon of ſharpnes quickly piercing maketh way for, and letteth in the middle blunt yron. I haue ſpoken ſomewhat of the* wedge *in the two laſt Chapters.* Ælian *in this Chapter ſheweth the number, and manner of framing it, and how many troupes ought to attend the* Phalange, *and vnder what offices, and degrees.*

1 Let the firſt troupe be of 64 men] *The number of the* wedge *ought to be 64 horſe. You make it beginning (as the* Rhombe *that ranked, but filed not) with a ranke of 15 horſe. Then muſt you proceed toward the front, with an other ranke of 13, the middle man filing with the middle man of the firſt ranke, and the reſt with the reſt. And ſo you are to continue abating ſtill two in euery following ranke, till at laſt you come to one, who is the Commander of the Troupe, and ſtandeth in the point of the front.*

2 He ſhall carry the Cornet] *The place of the* Cornet *is not right ſet downe in the figure. He there ſtandeth on the right hand of the middle man of the ſecond ranke, whereas he ſhould ſtand on the left. And you muſt not account the ſecond ranke to be the ranke next to the Commander in the front; but as* Ælian *doth, that was ſecondly placed after the firſt conſiſting of 15, which was in the* Reare. *So that the* Cornet *is to ſtand in the next ranke to the* Reare.

But here is nothing ſaid concerning the diſtances, that ought to be betwixt horſe, and horſe. Of the diſtances betweene foote, and foote he hath ſpoken in the 11 Chap: But of the diſtances betwixt horſe, I finde nothing, but generall words. That which wanteth in Ælian, *I will ſupply out of other Authors. We muſt vnderſtand then, that two kinde of diſtances were obſerued amongſt horſemen; one for marching, an other for fight.*

In marching there ought to be 6 foote betwixt horſe and horſe. Ælian *hath before giuen this diſtance to the foote. And that horſe held it likewiſe appeareth by* Polybius. *Who reprehending* Calſthenes *for careleſneſſe in deſcribing the battaile betwixt* Alexander *and* Darius *at* Iſſos, *ſpecially taxeth this: That he placed thirty thouſand horſe, and thirty thouſand mercenaries, in foureteene furlongs of length. whereas the place was not capeable of halfe the horſe.* [n] *His words haue this ſenſe;* The order of horſe, when they are prepared for fight, is for the moſt part 8 in depth. And there is a diſtance to be left in front betwixt euery troupe, to giue liberty to *wheele* and *double-wheele.* So that one furlong will conteine 800 horſe; and 10 furlongs 8000; 4 furlongs 3200: And eleuen thouſand, and two hundred Horſe will fill the ſpace of 14 furlongs in length. *The words ſeeme at firſt ſomewhat obſcure, being well weighed they will be cleare enough.* Polybius *ſaith, that theſe* 800 *horſe were ordered* 8 *in depth, and that they tooke vp a furlong of ground in length. There muſt be therefore of them a hundred files. For a hundred files of* 8 *horſe a peece, will ariſe to* 800 *horſe. Compare then theſe* 100 *files, (the length of the battaile) to the length of a furlong. And ſeing a furlong conteineth* 400 *Cubits, or ſix hundred foote, euery file ſhall haue* 4 *cubits, or* 6 *foote ſpace betwixt them. And ſo the diſtance betwixt file and file in a march will be* 4 *Cubits, or* 6 *foote. The other diſtance of three foote appeareth in* [o] Leo, *whoſe words ſtand thus:* Put the caſe, that the battaile is of 600 horſe in length, and 500 in depth, ſeing that euery horſe in length of the battaile poſſeſſeth three foote in breadth, the number of feete will amount to 1800; And ſeing againe that euery horſe in depth poſſeſſeth 8 foote, there will ariſe hereof 4000 feete; ſo that in the foure-ſided figure, out of the length of 1800, and the depth of 4000 feete ariſe 720 *Myriades* of ſquare feete. And the *Perimeter* alone of the outward foure ſides conteineth 11600 feete. And becauſe 6 feete make a fathome, and a 100 fathoms make a furlong, and 7 furlongs, and a halfe, make a mile, the whole *Perimeter* of 11600 feete will come to two mile, and a halfe, and neare a 10th part. In this diſtance therefore according to the cloſeſt order, or ſhutting, the thirty thouſand horſe are conteined. But if they ſtand not ſo cloſe, you muſt alter your account according to the thinneſſe, and out of the greatneſſe of place coniecture of the multitude of the people. *So* Leo. *Which place albeit it ſeeme to require a large interpretation, becauſe many things worth the noting offer themſelues in it; yet for this time I will onely inſiſt vpon that, which I firſt propounded, that is the diſtance of three foote betwixt horſe, and horſe, when they goe to charge (for that is the meaning of* Leo, *when he ſpeaketh of the cloſeſt order) which diſtance is expreſly here ſet downe. And the matter will yet ſeeme more cleare, if we adde the words of* Leo *in the* Paragraph *next, but one, to this, which are theſe:* The oldeſt Tacticks in ordering of foote Battailes giue euery man at the firſt diſtance foure Cubits; when the battaile is cloſed two Cubits; when ſerred and ſhut one Cubit. Out of which proportion a *Scout* may exactly diſcouer by the quantitie of the place the number, not onely of horſe, but of foote alſo. *Theſe oldeſt Tacticks that* Leo *mentioneth agree with* Ælian, *as wee haue ſeene. But where the foote haue three diſtances, the horſe are to haue but two. The open order of ſix foote they ought to haue, and likewiſe that of three foote; nearerer they cannot come together, becauſe of the bredth of their horſe, and becauſe they are to haue roome ſufficient for the weilding of their weapons.*

All the Troupes are to be in number 64] *A Troupe conſiſts of* 64 *men, and to the Phalange belong* 64 *Troupes, as the Phalange conteineth* 64 *Enſignes, or Syntagma's*

n Polyb. lib. 12. 663. A.

o Leo cap. 17. §. 89.

tagma's of armed foote. To which Ensignes the 64 Troupes of horse are proportioned. Their place is according to Ælian after the light-armed; not one troupe after, or behind an other, but one beside an other, in one front; and that front in a right line, which stretcheth out, as long as the Phalange of armed it selfe. Now the files of the armed being 1024 in number, and the number of the horse in the last ranke (which conteineth the length of the Horse-battaile, and should answer the number of files) but 960, we must seeke out a proportion to make the length of both equall one to another. The difference then betwixt them in length is 64 men, which in order take vp 192 foote. And where there goe foure Phalangarchies to a fourefold Phalange, and 16 troupes of horse are placed behind euery Phalangarchie, we must diuide these 192 foote into foure parts; euery of which parts will amount to 48 foote, and giue to each troupe three foote distance one betwixt an other (for distances betwixt one troupe, and an other, Polybius holdeth necessary) and so shall the 16 troupes of horse take vp as much ground in length as a Phalangarchie. The one conteining 256 files in length which occupy 768 foote of ground, and the other 240 men in the last ranke, which occupy 720 foote. To which adding 48 foote of distance, there ariseth the euen number of 768. And so shall the 64 troupes of horse be euen in length with the fourefold Phalange.

The names of the Offices, and Commands of the Horse follow, wherein as I before noted in the foote, we must not presse too neare the property of words, but take them, as they haue beene vsed among Souldiers.

3 Two troupes are called an *Epilarchie*] One troupe is called Ile, and the Commander an ° Ilarch; for so he is termed before in Ælian. Two troupes an Epilarchie, and the Commander an Epilarch, as it were a Commander ouer two Iles, troupes. He hath 128 Horse vnder his command. ° Cap. 18.

4 A Tarentinarchie] Of Tarentines mention is made in the second Chapter. The name of a Tarentinarchie is not giuen to this Troupe, because it consisted of Tarentines, but because of likelyhood the Tarentine horsemen had so many in a troupe. Let it be, as it will, it signifieth here a troupe of 256 Horse.

5 An Hipparchie] Properly signifieth the command of horse, and Xenophon vseth the word Hipparch for the Generall of horse; but Ælian, and the Tacticks vse it for the command of 512 horse.

6 An Ephipparchie] As it were a command ouer two Hipparchies, or ouer 1024 horse.

7 A Telos] The name of Telos is giuen both to a body of horse, and to a body of foote. A Merarchie was called by some Telos (saith Ælian before) and conteined 2048 armed. The Telos of horse conteineth 2048 horse. So the bodies are equall in number. The word sometimes signifieth a Command, or Dignitie, from which signification this body, as seemeth, hath the name.

8 Epitagma] The whole body of light-armed was called an Epitagma, which name is giuen likewise to the whole body of horse comprizing 4096 horse. It may be they are both so called, because they are placed behind the Armed, as I noted before. For that place Ælian assigneth vnto them.

The diligence to be vſed in choice, and exercitſe of the beſt formes of Battailes.

Chap. XXI.

THE Inventions and conceits of thoſe, that liued in old time, about *Troopes* of *Horſe* are declared, in what forme euery one was caſt, and for what cauſe ſome vſed one forme, ſome another. Now it behoueth (as in things that carry with them great difference) not careleſly, and negligently, to rely vpon the bare precepts; but rather by daily exerciſe to make tryall of euery kinde of figure, and ſo attayning to the perfect knowledge of that, which is readieſt, and of moſt advantage, to admit and receiue it in true fight. For it were great ſimplicitie, conſidering in matters of leſſe importance men by curious inquiry reach to the exact finding out of many things, herein not to ground vpon perfect and ſure experience, before we come to ioyne with the enemy.

Troopes may be inlarged or leſſened, as it ſhall ſeeme convenient to him, that hath the command.

Of Chariots; the names, and degrees of the Commanders.

Chap. XXII.

AS for ordering *Chariots* and *Elephants*, albeit they are worne out of vſe, yet to make vp the meaſure of this diſcourſe, I will remember their names, as they are ſet downe in ancient writers. In the Art of ordering Chariots for the field, they call two Chariots a [1] *Zygarchy*; Two *Zygarchies* a [2] *Zyzygi*; Two *Zyzygies* an [3] *Epyzyzygi*; Two *Epizyzygies* an [4] *Hartamarchy*; Two *Hartamarchies* a [5] *wing*; Two *wings* a [6] *Phalange*.

A man may vſe many and ſundry *Phalanges* of *Chariots*, and yet retaine the ſame names in euery *Phalange*. Some haue framed ſimple *Chariots* to ſerue withall; other ſome haue armed them with *Sithes* prominent and ſtanding out on each ſide.

Notes.

THere were two kinde of Chariots vſed of ancient time, the one a ſimple Chariot, the other a Chariot armed with ſithes. The firſt kinde was vſed by the Heroes (as they terme them, that is the renowned Souldiers of old, ſuch as were Achilles, Hector, Cycnus, Æneas, Turnus) as appeareth by Homer, Virgil, Ovid, and other Poets. The laſt was brought in by the Generalls of later times, eſpecially by thoſe that raigned in Aſia, and in Africa. For the [m] Europeans haue counted them fruitleſſe, and vaine mockeries, and amongſt them you ſhall hardly finde any mention of Chariots. Ælian toucheth them onely, becauſe both they, and Elephants were in his time growne out of vſe. Wherefore I meane likewiſe to paſſe them ouer ſleightly, onely directing the Reader, that is deſirous to vnderſtand their manner of fight to places of Hiſtorie, where they are mentioned. And firſt ſee for their

[m] Liv. decad. 4. lib. 7. 142. B.

Forme.

Forme. Xenoph. Cyrop. lib. 6. 152. D. E. & 156. B. C. de exped. Cyr. lib. 1. 264 A. B. Liu. decad. 4. lib. 7. 142. A. Diodor. Sicul. lib. 17. 596. Quin. Curt. lib. 4. 119 & lib. 8. 371.

Their violence, Diod. Sicul. lib. 17. 593.

Their place in the battaile, Xenoph. Cyrop. lib. 6. 168. C. D. Liu. decad. 4. lib. 7. 142. A. Diod. Sicul. lib. 14. 408.

Remedies against them, Diodor. Sicul. lib. 17. 592. 593. Xenoph. de exped. Cyr. lib. 1. 265. Liu. decad. 4. 142. Quint. Curt. lib. 4. 141. Plutarch. in Sylla.

I come to the names of the Commands of Chariots.

1 A Zygarchie] *The command of two Chariots; as it were a yoake of Chariots.*

2 A Syzygy] *The command ouer two yoakes, as it were, of Chariots ioyned together; that is ouer 4 Chariots.*

3 An Epiſyzygy] *The command ouer foure yoakes of Chariots, that is ouer eight Chariots.*

4 An Harmatarchie] *Properly the command of Chariots. But vſed by* Ælian *for the command of 16 Chariots.*

5 A wing] *As foote, ſo Chariots, and Elephants, had their wings of battaile. To the wing went 32 Chariots. Yet finde I this order of imbattailing Chariots no where, but in* Ælian. *He that will, let him read the places, that I haue noted before, for the ordering of Chariots. Notwithſtanding I can not doubt, that the names giuen here by* Ælian, *are taken out of ancient writers.*

6 A Phalange] *It conſiſteth of 64 Chariots; and wee here ſee, that Chariots alſo had their Phalanges, as well as foote, and Horſe.*

Of Elephants; the names, and degrees of their Commanders.

Chap. XXIII.

TOuching *Elephants*, he that is Commander of one *Elephant* is called [1] *Zoarcha*; Of two [2] *Therarcha*, and the body a *Therarchy*; Of foure [3] *Epitherarcha*, and the body an *Epitherarchy*; Of eight [4] *Ilarcha*, and the body an *Ilarchy*; Of 16 [5] *Elephantarcha* and the body an *Elephantarchy*; Of 32 [6] *Keratarcha*, and the body a *Keratarchy*. That which conſiſteth of 64 wee call [7] a Phalange of *Elephants*, as if a man ſhould name the Commander of both the wings *Phalangarcha*.

Notes.

THe *vſe of Elephants was greater amongſt the people of* Aſia *and* Africa. *Thoſe of* Europe *eſteemed them not much. And yet we finde, that they were brought into the field by the* Romans *alſo; who firſt ſaw Elephants in* Italy *in the warres, they had againſt King* Pyrrhus. [a] *The* Indian *Elephant was preferred before the* African *for greatneſſe of body, ſtrength, and courage. Many things are written concerning the ſeruice of Elephants. But becauſe* Ælian *toucheth no more, then the names of the bodies, and the degrees of Commanders, I will only note ſuch things, as I finde concerning them in Hiſtories. Their kinde of armor, and furniture I haue taken out of* Liuy; *and expreſſed them as neere, as I could, in figure.*

[a] Liu. decad. 4. lib. 7. 141. Polyb. lib. 5. 425. C. D.

For

For their power, ſtrength, and manner of fight, ſee Diodor. Sicul. lib.17.609. & lib.19.717. Polyb.lib.1.35.D.&lib.5.425.C.

Their place in battaile, Diodor. Sicul.lib.17.685. Arrian.lib.5.111. Liu.decad. 4.lib.7.141.B. Appian.in Syriac. 107. Polyb.l.1.34.D.

The diſtance one from an other. Arrian.lib.5.111.

Light armed in the diſtances betwixt Elephant and Elephant, Diodor. Sicul. lib.17. 609. & lib.18.665.&lib 19.685.&716. Plurarch.in Pyrrho.

Remedies againſt Elephants, Diodor. Sicul.lib.18.665. & lib.19.717. Polyb.l.1. 42 A. Hirt. de bell. African. 416. Liu.decad.3.lib.7.194.C.

I haue noted before the improprietie of names giuen to militarie bodies as well in the armed and the light armed foote, as in horſe troupes, and in Chariots. That defect is no leſſe in Elephants. The Commanders and commands of them hauing names, which were at firſt large, and improper enough, but afterward made good by vſe, and receiued by the Tacticks *as ſignificant to expreſſe the things, for which they were inuented. The firſt is giuen to him that is to command one Elephant. Who is called*

1 Zoarchos] *The Commander of a liuing creature, that is of one Elephant. The next is*

2 Therarchos] *A Commander of Beaſts: which name is appropriated to him, that commandeth two Elephants, and the body it ſelfe is named a* Therarchie.

3 An Epitherarcha] *Hauing the authoritie ouer the* Therarchie *and the body is called an* Epitherarchie *comprizing foure Elephants.*

4 An Ilarch] *As it were the Commander of a troupe; and the body is called an* Ilarchie. Ile *is commonly applied to horſe, and ſignifieth a horſe troupe, and* Ilarcha *the Captaine. But here* Ilarcha *ſignifieth the Commander of* 8 *Elephants.*

5 An Elephantarch] *A Commander of Elephants; as though the other bodies before mentioned were not of Elephants. Such ſtraights are men often times driuen vnto in deuiſing new names for new things, which notwithſtanding paſſe afterward and growe familiar by vſe.* Elephantarcha *commandeth* 16 *Elephants, and the command is called an* Elephantarchie.

6 A Keratarch] *The Commander of a wing, the body a* Keratarchie, *hauing in it* 32 *Elephants. A wing of* Chariots *had as many.*

7 A Phalange] *This is the greateſt body and conſiſteth of* 64 *Elephants. But as* Chariots *may be ordered into many* Phalanges, *and yet the ſame names retained in euery one of the* Phalanges, *ſo it is in Elephants. For that armies haue had in them at once aboue* 64 *Elephants appeareth by Hiſtories.* Polybius, *and* Diodor Sicul: *teſtifie,* [c] *the firſt that the* Carthagineans, [d] *the laſt that King* Porus *againſt* Alexander *had the one* 140, *the other* 130 *Elephants in their armies.* [e] *The ſame* Polybius *ſaith that* Ptolomey *had againſt* Antiochus 73 *Elephants in his armie, and* Antiochus 102. *And* [f] Plutarch *reporteth that* Androcottus, *King of a part of* India, *gaue to* Seleucus *at on time* 500 *Elephants.*

c Polyb. lib. 1. 39. B.
d Diod. Sicul. lib. 17.
e Polyb. lib. 5. 421.
f Plutarch. in Alexand.

The names of military motions expreſſed in this booke.

Chap. XXIV.

THus haue we ſet downe in particular the kindes of perfect Forces together with the ſeuerall names of euery body; Which being premiſed, it ſeemeth fit

fit to deliuer the words of exerciſe, that when the Commander, ſhall will any thing to be done, the Souldier in daily experience acquainted before with the ſignification of euery of them, and with the moouing in each figure may eaſily performe and execute, whatſoeuer is commanded.

There is a motion called *Cliſis* whereof one kinde is to the Pike, the other to the Target; Another is called *Metabole*; another *Epiſtrophe*; another *Anaſtrophe*; another *Periſpaſmus*; another *Ecperiſpaſmus*; beſides we ſay to *file*; to *ranke*; to returne to the firſt *poſture*; to *countermarch*; to *double*. Likewiſe we vſe the words Induction; *and* Deduction to the right, or left hand; a *broad-Phalange*; a *deepe-phalange*; and *vneuen-fronted Phalange*: and *Parembole*; and *Protaxis*; and *Entuxis*, and *Hypotaxis*; and *Epitaxis* and *Poſtaxis*. The ſignification of which words I will ſhortly deliuer. And yet I am not ignorant, that the precepts of warre are not by all *Tacticks* expreſſed in the ſame tearmes.

Notes.

Ælian in the Chapters precedent, hath numbred vp all kindes of forces, as well foote, as Horſe, and Chariots, and Elephants, that in ancient time were accounted neceſſarie for warre. And hath giuen them their armor, and furniture, and diſtinguiſhed them into militarie bodies, and imbattailed them, and taught the diſtances, that they ought to hold in fight. It followeth now that he ſpeake of motions military; which are the life of an armie, and onely giue meanes of victorie; and without which all preparation of forces is vaine, and auaileth nothing in the field, nor to the end, for which they were leuied. This Chapter then conteineth the names of thoſe motions; the following Chapters the particular explication of them. To which we will note, what we finde in ancient writers. For the ſignification of the words, I referre them to the ſeuerall Chapters, where they are expounded.

Of turning, and double turning the Souldiers faces, as they ſtand embattailed.

Chap. XXV.

1 *Cliſis* or turning of the face, is the particular motion of euery Souldier declining his face either to his Pike, that is to the right hand, or to his Target, that is to the left hand. The vſe of it is, when the enemie ſheweth himſelfe in *flanke* 2 to encompaſſe our winges, or elſe to charge vs: or for ſome other cauſe, whereof I will ſpeake in conuenient place. 3 Two turnings of the face towardes the ſame ſide transferre the ſight of the Souldier to the *reare* of the battaile. And this kinde of motion is called *Metabole*: being alſo vſed either to the *Pike*, or to the *Target*. In the firſt ſtanding the mouing of the Souldiers face toward the Pike is called *Cliſis*, the ſecond mouing the ſame way *Metabole*. For *Metabole* is the conuerſion of euery mans face particularly to the place, which was behinde his backe. And the ſame that *Metabole* is in ech ſeuerall Souldier, the ſame is *Periſpaſmos*, or wheeling about in the whole battaile. There are 4 two kinds of *Metabole*, the one from the enemie, the other to the enemie. *Metabole* is defined to be a changing of euery mans face in particular from the front to the

reare;

reare; or contrariwise. Turning about from the enemie is, when the Souldier turneth his face twice towards the Pike; To the enemy, when hee turneth twice towards the Target.

Notes.

Foure kinde of Motions are set downe by Ælian *whereby vpon any occasion the battaile may be somewhat changed:* Turning of faces, countermarch, wheeling, *and* doubling, *whereof the first may be vsed, in what order soeuer your battaile standeth, the second onely in* open order, *the third in* close order *only, the fourth either in close, or open order.* Clisis, *or turning of faces, whereof this Chapter intreateth, albeit it may bee brought in also in open Order; Yet is it not don for the most part but in close order; and then especially, when none of the other motions haue place. The* Græcians *alwaies coueted to bring their* file Leaders, *that is their* best men, *to fight. In* open Order *they chose to countermarch; In* close Order, *hauing place, to wheele their battaile about, and so turne the face of it against the enemy. If they could doe neither of these, they came to the last remedy, which was* turning of faces *of euery particular man in the battaile.*

1 Clisis, or turning of faces] *This motion is of lesse paines then any other, but of no lesse importance, or necessitie. In the rest the* Phalange *changeth the place, or the forme: In this it holdeth both, and yet is ready for any attempt of the enemy. Onely euery Souldier in particular turneth his countenance to the right or left hand, as he is commanded. To turne his face to the Pike is to turne to the right hand, because that hand bore the pike, to turne to the Target is to turne to the left hand; because the* Macedonians *caried their targets on their left shoulder. For the vse of this turning of Faces,* Ælian *saith,* It hath place when the enemie sheweth himselfe in flanke

2 To incompasse, our wings] Clisis *is no more, then bearing faces to the right, or left hand, that is to our wings. When then we finde our enemies, to incompasse our right wing, wee turne our faces, and weapons that way to receiue him: to the left, when he commeth to charge vs on that side. If on both sides, then turne wee the faces of our* Phalange *halfe to the right, halfe to the left hand; which is the* Antistomus Phalange *whereof* Ælian *speaketh hereafter. Briefely, there is almost none of the marching* Phalanges *which are afterward discribed, but it hath neede of this motion. Besides if vpon any occasion the* Phalange *be to moue from any of the flanks, you are only to command Turning of faces to that flanke, and then to lead on. I will giue an example, or two.* [a] Alexander at Arbela hauing imbattailed his armie to fight with *Darius*, had intelligence, that *Darius* had strowed the ground betwixt the two armies with Calthropes. He *commanded therefore the right wing, which himselfe led, to* turne faces to the right hand, and follow him, to the end to go round about, and auoide the places, that were sowed with Calthropes. *Darius* marching against him to the left hand, disioyned his troupes of horse, and *Alexander* taking the aduantage, and giuing in quickly betwixt the spaces, put *Darius* to flight. *If* Alexander *had marched on with the right front, he had fallen vpon the Calthropes. To auoide them, he vsed the benefit of this motion, and* turning faces *to the right hand he led on, vntill hee had passed the danger, and then turning againe to the first posture, went to charge, and defeated the enemie. An other example is in* [b] Polybius, *who describing the battaile* betwixt Machanidas the Lacedemonian Tyrant, and Philopœmen the Achæan Generall, telleth, that Machanidas hauing in the left wing put the *Achæan* mercenaries to flight, followed hard the chase. *Philopœmen* as long, as there was hope, indeuoured by all meanes to stay his men: when he saw them vtterly defeated, hee hasted to the right

a Polyen. lib. 4. in Alexand. § 17.

b Polyb. lib. 11. 634.

right wing, and perceiuing the enemie busie in chase, and the place voide, where the fight had beene, commanding the first *Merarchies* to turne their faces to the right hand, hee led them on with high speede, not yet breaking the order of their imbattailing. And quickly seazing vpon the forsaken ground, hee both cut betwixt them, that gaue chase, and home, and withall got the aduantage of the vpper ground against the left wing of the armed. Whereby hee obteined the victory. *If* Philopœmen *had in this action vsed wheeling of his battaile, which onely was the other motion, which would haue serued his turne, besides the troublesomenesse of the winding about, he should haue beene forced to haue vsed two wheelings, and so failed of the celerity, which was at that time requisite. Faces were turned in a trice, and he made himselfe Master of the ground, hee desired, before hee could haue wheeled once his battaile.*

3 Two turnings of the Souldiers face] Clisis, *or turning faces to the right, or left hand, consisteth of one turning and moueth no further, then the side. If the motion be to the reare, it hath two turnings, and is called* Metabole, *which is defined to bee a* changing of euery mans face in particular from the front to the reare, or contrariwise. *And as wheeling of the whole body carieth about the fronts of the battaile to the reare; So doth* Metabole *turne the face of euery particular Souldier, and maketh him looke from the front to the reare. The word properly signifieth a change, which happeneth herein, when the souldiers are changed from the front to the reare, or contrariwise. The vse of* Metabole *is principally to resist the enemy that giues on vpon the reare.* [a] *So* Pyrrhus *being entred the Citie* Argos *with a few, and ouerpressed with multitude, retired by little and little, and defended himselfe, often turning his and his souldiers faces against the enemy.* [b] *So the armie of* Cyrus *the elder retiring from* the walles of Babylon, often turned about their faces to the left hand, and waited their enemie, who were reported to be on foote, and ready to come and charge them. *And if the enemy assault both the front, and reare, it hath beene the manner to continue halfe the souldiers in each file with their faces to the front, and command the other halfe to turne their faces to the reare against the enemie behind. And this forme is called* Phalanx Amphistomos *described by* Ælian *cap.* 38. *And sometimes it is vsed to speed our march, and preuent the enemie, as was said before of* Clisis. [c] Agesilaus made an incursion into the Territory of the *Thebans*, and finding a Trench, and Ramper cast vp by the *Thebanes* for defence of their Countrey, and onely two narrow waies betwixt, he cast his armie into a hollow *Plinthium*, or square, and led it against the left hand passage, whither all the *Thebans* flocked for defence. But hee turning about faces from the reare, hasted away, and gained the other passage, where no man was present to resist, *and entring spoiled the Country; and returned without impeachment.*

[a] Plut. in Pyrrh.

[b] Xenoph. Cyro. lib. 7. 189. D.

[c] Polyen. lib. in Agesilao.

4 There are two kinde of Metaboles] *Before were rehearsed two kinde of turnings of faces about, one to the* pike, *the other to the* target, *here is added two more, one from the enemy and the other against the enemie; which are all one indeed, and differ onely in name. What the true meaning of these turnings should be, I am in doubt,* Ælian *expounding them one way,* Suidas *an other.* Ælian *esteemes them by the right, and left hand,* Suidas, *albeit he haue that signification also, esteemeth them by the front and reare. Therefore* Suidas *defines the turning from the enemie to bee* a turning about, toward the reare: *that against the enemie,* a turning about toward the front. Ælian *would haue the first to* containe two turnings toward the right hand, *the second* two turnings toward the left. *I for my part assent rather to* Ælian. *For touching the turnings of* Suidas, *I cannot yet vnderstand, why turning toward the reare should be a turning from the enemie; Or toward* the front *a turning to the enemie: Considering that whether*

whether ſoeuer you turne faces, *the enemie is imagined to be there; faces and weapons being to bee oppoſed alwaies againſt the enemie, which is the onely end of turning.* Ælians *opinion ſeemeth to haue more probability in it, at leaſt if I conceiue the right reaſon. For I take it thus: That ſeeing the* Græcians (*as the* Romans *likewiſe*) *were Targetieres, and caried their targets on their left ſide, and in fight aduanced that ſide alwaies neereſt the enemie, which they ſought to couer with their targets, that therefore the turning about to the enemy, was called* turning to the Target; *as contrarily turning to the right ſide, on which ſide the Pike was caried, and which being naked of ſuch defenſiue armes was called* [a] *the open ſide, and therefore further remoued from the enemy, might for the ſame cauſe be tearmed turning from the enemy. So that I take turning about* to the enemy, *and turning about to the* target *to be all one, as alſo turning about* from the enemy, *and turning about* to the Pike, *howſoeuer the name differ. This is my coniecture, which I ſhall imagine to be true, till I finde ſome man, that will bee pleaſed to giue me a more probable reaſon: I only adde now the words of command in this motion.*

[a] Latus apertũ.

Faces to the right hand.
Faces to the left hand.
Faces about, to the right or left hand. } *As you were,*
The figure ſheweth the manner.

Of wheeling, double, and treble-wheeling of the battaile, and returning to the firſt poſture.

Chap. XXVI.

[1] *Piſtrophe* (or wheeling) is when the battaile being ſo cloſed, that no man can turne, or twice turne his face by reaſon of the neereneſſe of man to man, it wholy, and iointly wheeleth (as a ſhip, or ſome other body caried about) the order thereof remaining vndiſſolued. When the wheeling is to the Pike, we warne the right-corner-file-leader to ſtand ſtill (as it were the hooke of a doore hinge) and the reſt of the battaile proceeding forward to turne about the ſame file-Leader like the doore. In the ſame manner is wheeling to the Target; It may be thus defined: *Epiſtrophe* is, when ſhutting the battaile by gathering cloſe the Followers, and Side-men, we turne it wholy (as the body of a man) toward the Pike, or Target, it being caried about the corner-file-leader, as about a Center, and, changing the place of the front, transferre the countenance of the ſouldier to the right, or left hand; the followers and ſidemen euery one remayning in file and ranke as before. How it is to be done I will ſhew hereafter.

Anaſtrophe, or returning to the firſt poſture, is the reſtoring of the wheeling to the place, where the battaile firſt ſtood cloſe, before it beganne to wheele. *Periſpaſmos*, or wheeling about, is the motion of the battaile in two wheelings, ſo that thereby the front commeth to the place of the reare. [2] *Ecperiſpaſmos*, or treble wheeling, is the motion of the battaile in three wheelings, ſo as, when it turneth to the Pike, the front commeth about to the left flanke; when to the Target, it commeth about to the right flanke.

Notes.

Notes.

THis Chapter hath a diuers kinde of turning from the other mentioned in the laſt Chapter, which for diſtinction ſake, is called Epiſtrophe, or wheeling. The other turned no more, then the ſouldiers faces, euery man yet keeping the ſame ground he had before. This wheeles the whole body, and changeth the place of the Phalange either to the right, or left hand, or to the reare. And as there was in the turning of faces a particular motion of euery particular ſouldier to the right, or left hand, called Cliſis, and an other turning about called Metabole: ſo is there in this a generall wheeling of the whole body to the right, or left hand, called Epiſtrophe, and an other wheeling about to the reare called Periſpaſmos. But let vs heare the deſcription.

1 Epiſtrophe (or wheeling) is, when the Battaile] Shortly Epiſtrophe is no more, then the firſt turning of the battaile to the right or left hand. In doing whereof firſt the files muſt be cloſed to the hand, you meane to wheele, then the rankes. Then the corner-file-Leader on the ſame hand is to ſtand ſtill, then all the reſt keeping their files, and rankes cloſed, to turne to the ſame hand iointly about the Corner-file-leader circle-wiſe, who is to moue by little, and little, till he haue turned his face to that ſide, which was intended. And when the firſt ranke is euen with him, and the reſt wheeled enough to the ſame hand, they are to ſtand ſtill: The words of the definition of Epiſtrophe (or wheeling) are plaine enough in Ælian; I neede vſe no expoſition. Now becauſe in exerciſe we relie not vpon one forme of motion alone, but acquaint our ſouldiers with all the kindes; It is neceſſarie to bring the body againe to the firſt place, to the end we may proceede in the reſt. This reducing to the firſt Poſture is called Anaſtrophe, by which the battaile returneth, but by a contrary hand, to that, to which the Epiſtrophe was made. And but for changing the hand the wheeling backe againe is all one with the wheeling forward. Wee ſhall ſee hereafter how it is done. To bring the battaile to haue the front, where the reare was, you muſt vſe a double wheeling. And that is called Periſpaſmos. Which commeth of two Epiſtrophes, and is made either to the right, or left hand. Onely it muſt bee obſerued, that if the Periſpaſmos (or wheeling about) be to the right hand, the Anaſtrophe (or reducing to the firſt poſture) muſt be to the left. Contrarie it is if the Periſpaſmos were to the right hand.

2 Ecperiſpaſmos] I could neuer hither to conceiue any vſe of a treble wheeling (for ſo Ælian takes the word) vnleſſe a Periſpaſmos were firſt made, and the battaile had the front already brought to the reare, and ſo an Epiſtrophe added from the reare to the ſame hand. Otherwiſe ſeeing that one wheeling is ſooner made, then two, and therefore ſooner then three, I ſee no neede of three wheelings, eſpecially ſeeing we may doe that, wee deſire with one. For example, let vs wheele our battaile thrice to the right hand, the front will come to be in the place of the left flanke. The ſame will be performed as well with one wheeling to the left hand. Et fruſtra fit per plura, quod poteſt fieri per pauciora, eſpecially in matter of warre, where the leaſt moment of time often carieth the whole buſineſſe. The like may be ſaid of Ecperiſpaſmos to the left hand.

The vſe of the motions of wheeling, and double wheeling, is, when the battaile being cloſed, and the enemy comming to aſſault you in any other one place, then the front, you ſeeke to bring the beſt men to fight. For if you be to be charged in two places at once, or more, wheeling helpes little; except it be to turne the front to one enemy, and in that caſe your onely ſhift is, to turne faces againſt them, that come to charge, on what ſide ſoeuer they come. Examples of theſe two motions, I meane Epiſtrophe, and Periſpaſmos meete vs almoſt in euery Greeke Hiſtorie. Of which I will repreſent one, or two, eſpecially of the

latter; the rather becauſe practiſe giueth both light, and liſe to precepts. [a] Plutarch *recounteth*, that after King *Pyrrhus*, had in vaine aſſaulted *Sparta*, he was invited by an *Argiuan* named *Ariſtæus* to receiue *Argos* into his protection, and that hee marched thitherward with his armie. *Arieus* the king of *Lacedemonia* laying ambuſhes for him, and taking the principall ſtreights, by which he was to paſſe, charged his reare, wherein the *Galatians* and *Moloſſians* were. When *Pyrrhus* heard the bruite and noiſe, he ſent his ſonne *Ptolomy* with the band of Companions to aide, himſelfe with all ſpeede marching out of the ſtreights, led on his armie. The medly being ſharpe about *Ptolomy*, and the choſen *Lacedemonians* commanded by *Eualcus* ſtanding cloſe to their buſines, *Oroeſus* a *Candiot* of *Aptera*, valiant of his hands, and ſwift of foote, running croſſe againſt the young Prince gaue him a deadly ſtroke and ouerthrew him. His fall made the reſt to flie. And the *Lacedemonians* hauing the victorie, and following the chaſe came into the Champian ground ſtill killing but not remembring they were followed with armed foote. Vpon whom *Pyrrhus*, hauing euen then heard of, and being much mooued with the death of his ſonne, wheeled about the Moloſſian horſemen. And himſelfe firſt aduancing vpon the ſpurre imbrued himſelfe with the ſlaughter of *Lacedemonians*. He alwaies ſeemed mighty, and terrible in armes; but then he exceeded himſelfe in daring and valor. For turning his Horſe vpon *Eualcus* who ſhunning him, ſhifted aſide, and with all ſtrooke at his bridle hand as he paſſed by, and wanted but little of cutting it off. But miſſing the hand, he light vpon the raines, and carued them quite a ſunder. *Pyrrhus* with all ſtrooke him thorough the body with his Launce. Then leaping from his horſe, and fighting a foote, hee cut in pieces the choſen *Lacedemonians*, that fought to recouer the body of *Eualcus*. This was the fight that *Pyrrhus* made by wheeling about his Horſemen againſt the *Lacedemonians*, that followed vpon his Reare. Another example of *Wheeling* about is reported by *Polybius*, and it is of *Amilcar Annibals* father, *this is the hiſtory.* The mercenary ſouldiers of the *Carthaginians* reuolted from them, and ouerthrew ſome of their Generalls, and ſhut them vp within the Citie of *Carthage*, poſſeſſing both other ſtreights, that led into the Countrey, and alſo a bridge laide ouer a riuer called *Macar*, which riuer was not paſſable, but by that Bridge. Beſides, they built a City for defence of that Bridge. *Amilcar* ſeeking to diſlodge the enemie from that Bridge, and hauing no way to come at them conueniently; obſerued, that when certaine windes blew, the mouth of the riuer toward the ſea was commonly filled vp with ſand, and would giue paſſage ſufficient for his armie. Finding then a fit time, hee put ouer his army in the night, and before day, or ere any man knew of it, made himſelfe Maſter of the paſſage; and preſently led againſt them, that held the bridge. *Spendius* (hee was one of the chiefe Rebells) hearing thereof, aduanced to meete *Amilcar* in the plaine, and both ten thouſand from the City at the bridge foote, and fifteen thouſand more from *Vtica*, came out one to aide another, thinking to wrappe in the *Carthaginians* betweene them; who were not aboue ten thouſand Souldiers of all ſorts, and 70 Elephants. *Amilcar* led on his armie. Before were the Elephants, the horſe, and light armed followed next, the armed foote came laſt. And perceiuing the enemie, that followed his Reare, preſſed hard vpon him, he commanded his whole armie to turne about. Thoſe that were in the Vangard of the march hee willed to returne to him with ſpeede; the other, that at firſt had the reare, hee wheeled about, and ſtraight oppoſed againſt the enemy. The *Lybians* and mercenaries imagining the *Carthaginians* fled for feare, fell vpon them diſorderly, and boldly came

a Plut. in Pyrrh.

to

to hands. But when they ſaw the Horſemen, being now turned about, and come vp neere to the foote, and already put in order, make a ſtand, they themſelues, by reaſon they looked for nothing leſſe, fell into a feare, turning their backes fled preſently, as before they gaue on vnaduiſedly, and ſtraglingly. And ſome of them falling vpon their owne people, that were comming on, wrought both theirs, and their owne deſtructions: otherſome were trampled vpon, and trode to death, by the horſe, and Elephants, that followed the chaſe. *Thus farre* Polybius. *And thus farre of Wheelings. The figure, and words of command are reſerued for the 32 Chapter, where the manner of* wheelings, *and* returning to the firſt poſture *is ſet downe.*

Of filing, ranking, and reſtoring to the firſt poſture.

Chap. XXVII.

TO file is, when euery particular man keeping equall diſtance from other ſtandeth in his owne file lineally betwixt the file-Leader and bringer-vp. To ranke is, to be in a right line euen with his ſidemen in the length of the battaile. [1] To reſtore to the firſt poſture is, to bring the ſight of the Souldier to the ſame aſpect, he had before the firſt turning. As if his face were at firſt towardes the enemy, being commanded to turne towards the Pike, and thence to returne to his firſt poſture, hee is againe to returne his face toward the enemy.

Notes.

OF filing, and ranking enough is ſpoken before.

1 To reſtore to the firſt poſture] *This motion differeth from* Anaſtrophe *before ſpecified. For* Anaſtrophe *bringeth backe againe the whole body to the firſt place after a Wheeling: This the Souldiers faces particularly to the firſt aſpect. So that this is vſed after the making of an* Anaſtrophe. *For alwaies in motions it is requiſite, that the Souldiers faces moue* forward. *To moue* backeward *hath many inconueniences, of ſtumblings vpon vneuen ground, or ſtones, or pittes, or ſtubbes, or ſuch like. Which is the cauſe that in* Anaſtrophe *after a Wheeling,* Ælian *willeth, that the Souldiers* turne their faces the contrarie way firſt, then moue on, *till they haue recouered their firſt ground, then open rankes, and files, and laſtly to reſtore to the firſt aſpect. And as it differeth from* Anaſtrophe *ſo differeth it likewiſe from* Metabole. Metabole *only turned faces about, this ſetteth the Souldier in his former poſture, not onely for his face, but for his armes, alſo, which are ordered as at firſt. The wordes wherein this motion is expreſſed by* Ælian *are* Ep orthon apodounai, *and* Eis orthon apocataſteſai, *which is interpreted by* Gaza *in* arrectum reddere, *to reſtore vp right, by* Arcerius rectum reddere, *to reſtore right, and ſo the words ſound.* Ælian *interpreteth it to ſet againe the Souldiers ſight in the ſame aſpect in which it ſtood at firſt: as if being placed with his face againſt the enemy he be commanded to turne his face to the Pike, and then againe to reſtore his face to his firſt poſture, he muſt returne, and ſet his face againſt the enemy.* Ælian *therefore referreth it to the ſight, he firſt had, which if it bee the right meaning, how can it*

be vpright, or right, more in that, then in any other posture. For the Souldier not onely in front, but in flanke, and in the reare carrieth himselfe vpright, or right. I doubt not, but that it may be applied to the vpright standing of men, as appeareth by sundry places of Paulanias : *Who reherseth, that* Mineruas *Image set* [a] *in the Temple* Parthenion *standeth vpright,* orthon esti, *and in an other place, that in* Corinth [b] *in the Temple* Pantheon, *there were two Images of* Mercurie *standing vpright,* Ortha, [c] *and that in the Temple of Fortune the image of Fortune was carued of* Parian-*stone, and stood vpright:* Orthon: *and that in* Neptunes *Temple situate in the* Corinthian Isthmus, *the images of* Amphitrite *and* Neptune *stand in a Chariot, and the boy* Palemon *vpright vpon a Dolphin,* Orthos. *In all which places* Orthos *designeth the* site of men. *But here, as I take, it cannot be so applied. Because in euery motion, not onely in this, the men stand* vpright. *How then can they be restored to their standing vpright, when they doe it already. I take the* originall of the appellation *to come from another cause, and that is from* the ordering of the Pike. *For when the battaile is first set in the field, euery Souldier standes with his Pike* ordered, *that is* vpright. *For* to order a pike *is to set the butt end on the ground before the Souldier somewhat wide of his right foote, and to hold it vpright with the right hand borne euen with the shoulder. But when you beginne, or continue any motion, the manner is to* aduance, *or* to shoulder the Pike, *and so to proceede. But being commanded* to returne to the first posture, *it must bee* ordered *againe. So that the first posture of an armed man is to stand* with his pike vpright. *And after many motions and windings, he at last returneth to* the same posture, *which I take the command of* Epʼorthion apodounai *to signifie. Now that I may not seeme to relie vpon a probable coniecture alone, I will bring witnesse for the confirmation of my opinion. It is reported by* [d] Diodorus Siculus, that Agesilaus the Lacedemonian King with an armie of eighteen thousand foote, and fifteen hundred horse, inuaded *Bœotia.* The *Athenians* before hearing of *Agesilaus* comming had sent fiue thousand foote, and 200 horse to aide the *Thebans*, who gathering their armie together seized vpon a long narrow hill distant 20 furlongs from the City; And making the hard accesse to the place a kinde of fortification against the enemie, they there waited his comming, fearing to hazard vpon euen ground in regard of the renowne, and glory of *Agesilaus*. *Agesilaus*, hauing imbattailed his troupes, led them against the *Bœotians*; and approching neere, sent his light armed to sound their disposition to fight, which being easily repulsed by the *Thebans* by the aduantage of the higher ground, hee aduanced the rest of his forces being imbattailed in such manner, as might giue greatest terror. *Chabrias* the Athenian willed his Souldiers to awaite the enemy contemptuously both keeping their first array, and their Targets at their knees, and continuing their Pikes *vpright ordered*; who when they iointly as vpon a word giuen, did as they were commanded, *Agesilaus* both wondering at the good order, and at the assured fashion of the enemy thought it not fit to striue with vnequall ground, and by forcing them to fight, to compell them to be valiant, whether they would, or no. *Hitherto* Diodor Sicul. *of the Strategem of* Chabrias *against* Agesilaus, *which consisted in the contempt of* Agesilaus, *and all his forces: First in not* stirring one foote, *to meete the enemy, then in* keeping the array *they held before; further* in sincking their Targets to their knees; *Lastly* in continuing the former order *of their Pikes, that is not making readie to charge, but remaining with their Pikes ordered, as they were at first.* Agesilaus *aduancing his armie thought to strike a feare into his enemie;* Chabrias *trusting to the strength of the place, scorned the Bramado of* Agesilaus, *conceiuing, he would not be so hardy to aduenture the fight vpon so great an inequallity of ground. Hee therfore willeth the souldiers*

a Pausan. in Atticis 43.
b Pausan. in Corinth 89.
c Paulan. in Corinth. 87.
d Diod. Sicul. lib. 15. 473.

diers not to alter their poſture, but to continue as they were. The words concerning the Pike are: En ortho tò dorati menein. That is to continue their pikes vpright (En ortho) Now whether the ſame be the poſture, that the Tacticks deſcribe, when they ſpeake or reſtoring Ep' ortho, vpright, I referre to the iudgement of the Reader. [a] Polianus remembring this Stratagem vſeth ſomewhat different words, and yet conſenteth in meaning. Chabrias ſaith he, commanded his Souldiers not to runne out againſt the enemy, but quietly to ſtand ſtill holding their pikes before vpright, and their Targets before their knees which they were wont to doe, when they would a little eaſe themſelues of the weight of their Targets. Where Diodore, hath en ortho tò dorati menein, to continue their Rikes vpright. Polienus hath protinomenous ta dorata ortha, holding before them their Pikes vpright. But both haue pikes vpright, and Diodorus his Continue hath relation to the Poſture they were in, which Chabrias would not haue them to alter: Polienus his hold before to that they were commanded to doe. In ordering of Pikes at this day I haue ſhewed, that the Souldiers hold them vpright, the but end ſet on the ground before, and ſomewhat wide of their right foote. [b] Æmilius Probus reciting this hiſtorie peruerteth the Stratagem: He ſaith that Chabrias forbad the Phalange to giue backe, and taught his Souldiers to receiue the enemies charge kneeling with one knee, the other ſet againſt the Target, and with the Pike abaſed. Wherein hee quite diſſenteth from Diodore, and Polien. Diodore ſaith, the command was to keepe their array; Polienus not to runne forward, but quietly to ſtand ſtill; Probus not to giue backe. Probus ſaith, they ſhould kneele with one knee, and reſt againſt the Target with the other; Diodore that they ſhould hold their Targets ſunke to their knees; Polienus that they ſhould carry their Targets before at their knees. Probus that they ſhould abaſe, and charge their Pikes; Diodore that they ſhould continue, and order them vpright; Polien that they ſhould hold their Pikes vpright. So that Diodore and Polien agree, and expound one another: Æmilius Probus bringing in a new hiſtorie diſſenteth, as I ſaid, from the other two; eſpecially in making that to be a forme of fight preſcribed by Chabrias (a ſimple forme to receiue the charge vpon their knees) which was a contempt, to ſhew how little, eſpecially in that ſtrength of ground, he regarded Ageſilaus; which contempt alſo made Ageſilaus retire, not doubting but it proceeded from a great aſſurance of the enemy. Therfore as I ſaid I take theſe words ep' orthon apodounai, not only to appertaine to the aſpect of the Souldier, but alſo (and that much rather) to the erection, and ordering of Pikes.

[a] Polyen. lib. 2. in Ageſilao.

[b] Æmil. Prob. in Chabria. 105.

Of Countermarches, and the diuers kindes thereof, with the manner how they are to be made.

Chap. XXVIII.

THere are two ſorts of *Countermarches*, one by file, the other by ranke; each of theſe againe is diuided into three kindes. The firſt called the *Macedonian*: The ſecond the *Lacedemonian*: The third the *Choraan*, which is alſo the *Perſian*, and the *Cretan*. [1] The *Macedonian* is that, which leauing the ground, it firſt had, taketh in liew thereof the ground, which was before the front of the *Phalange*, and turneth the aſpect of the Souldier backeward [where before it was forward.]

2 The *Lacedemonian* is that, which leauing likewiſe the ground it firſt had, taketh in ſteed thereof, the ground which was behinde the Reare of the *Phalange*, and turneth alſo the face of the Souldier the contrary way.

3 The *Perſian* is the *Cretan*, and *Choræan*: This keepeth the ſame ground of the *Phalange*, euery ſouldier taking another place for that, he had, the file-Leader the place of Bringer-vp, and ſo the reſt in order; and turneth alſo the face of the Souldier the contrary way.

4 *Countermarches* by ranke are made, when a man would transferre the winges into the place of the Sections; and the Sections into the place of the wings, to the end to ſtrengthen the middeſt of the battaile. Likewiſe the right hand parts into the left hand parts, and the left hand parts into the right hand parts. They that feare to countermarch the *Phalange* in groſſe the enemy being at hand, doe it by *Syntagmaes*.

I will now ſet downe, in what manner countermarches ought to be made.

The *Macedonian countermarch* by file is ſaid to be, when the file-leader turneth about his face, and all the reſt with the Bringer-vp go againſt him on the right, or left hand, and paſſing on to the ground before the front of the *Phalange* place themſelues in order one after an other, according as the file-Leader himſelfe hath turned his face. Therefore it maketh ſhew to the enemy appearing in the Reare, of running away: Or it is when the file-Leader turneth about his face, and the reſt paſſing by him on the right or left hand place themſelues orderly one behinde another.

But the *Lacedemonian* is, when the Bringer-vp turneth his face about, and all the reſt turning alſo their faces, and proceeding forward together with their file-Leader order themſelues proportionably in the ground, which was behinde the Reare of the *Phalange*. Wherefore to the enemy appearing behinde, it makes a ſemblance of falling on. Againe the *Lacedemonian* is, when the file-Leader turning his face about to the Pike, or Target transferreth the whole file to another place equall to the firſt; and the reſt following ſtand, as before, behinde him. Or elſe, when the Bringer-vp turneth his face about, and hee, that ſtood next before him, paſſing by on the right or left hand, is placed againe next before him, and the reſt following are placed one before another in their former order till the file-Leader be the firſt.

The *Choræan* is, when the file-Leader turning about toward the Pike, or Target, precedeth the file, and the reſt follow, till the file-Leader haue the place of the Bringer-vp, and the Bringer-vp the place of the file-Leader. And theſe are the Countermarches by file.

In the ſame manner are *Countermarches* made by ranke in caſe a man would countermarch by ranke. For euery ranke Countermarching either keepeth the ſame ground, or changeth the right hand place, or elſe the left hand place, of the battaile, one of which muſt needes fall out, and neuer faileth.

Notes.

THe two former motions are performed, one in cloſe Order, the other in all Orders; Epiſtrophe *when the battaile is ſhut ſo cloſe, that (as Ælian ſaith) a man can turne his face neither the one way, nor the other*. Cliſis *in open Order, Order, and cloſe Order.* *The two following motions*, Countermarch, *and* Doubling, *one is done in* open Order, *the other for the moſt part in* open order too; *and yet ſometimes* in Order, *and* cloſe

See Leo cap. 7. § 83. 84.

close order; *as we shall see in due place. This Chapter handleth* Countermarches, *the next* Doublings. *Countermarch is* a motion, whereby euery souldier marching after other, changeth his front for the reare, or one flancke for the other. *For there are two kindes of* Countermarches, *one by file, and the other by ranke. And each of these is againe diuided into three; the first called the* Macedonian; *the second, the* Lacedemonian; *the third the* Choræan, *or* Cretan. *A* Countermarch by file *is, when euery souldier followeth his Leader of the same file;* By ranke, *when euery souldier followeth his fideman of the same ranke in the* Countermarch.

1 The Macedonian Countermarch] *in this* Countermarch, *the purpose of the Commander is to turne the front of his battaile against the enemy that sheweth himselfe in the Reare; and withall to take the ground that lyeth before the front of the* Phalange. *It is called the* Macedonian Countermarch *(saith* Ælian*) because the* Macedonians *were the inventers of it. Which of the* Macedonians *he telleth not, but excludeth* Philip, *and* Alexander, *who both vsed the* Lacedemonian Countermarch. *And before their times I haue not read of any warlike Kings of* Macedonia *The manner of it is this; First all the File-leaders turne their faces about either to the right or left hand; then the next ranke passeth thorough by them on the same hand; and being come to their distances, place themselues directly behind their File-leaders, and then turne about their faces the same way. And so the third ranke after them, and the fourth, and all the rest, till the Bringers-vp be last, and haue taken the reare of the battaile againe, and turned about their faces. The figure expresseth not well the action. For in it the Bringers-vp begin first to* countermarch, *which according to* Ælian *should moue last. Yet may this* Countermarch *be done, as the figure is. But I take* Ælians *way to be easier, and readier. And it may be also, that the* Countermarch *expressed in the figure is lost in the text. For one of the* Lacedemonian Countermarches, *which proceedeth the contrary way, beginneth the motion with the File-leaders, as this doth with the Bringers-vp, as wee shall straight see.*

2 The Lacedemonian countermarch] *In this Countermarch the proceeding is contrary to that of the former; that tooke the ground before the* Phalange, *this takes the ground after. In that the mouing was from the Reare to the front, in this from the front to the reare. This is the invention of the Lacedemonians.* Ælian *describeth it to be done in two manners: One, when the Bringers-vp first turne about their faces, and the next ranke likewise turning faces beginneth the Countermarch, and euery man thereof placeth himselfe directly before his Bringer-vp, and the third doe the like; and so the rest, till the ranke of the File-leaders come to be first: The other, when the File-leaders begin the Countermarch, and euery one in their files follow them orderly. The figure expresseth this last.* Ælian *preferreth the Lacedemonian Countermarch before the Macedonian: because in it the souldiers seeme to fall on, and goe to the charge; where in the Macedonian they seeme to flie. There are notwithstanding times, when it is better to vse the Macedonian. As in case you meane to march on, and not to fight with the enemy, except you be compelled: Or else you seeke to gaine some ground of aduantage. For the* Macedonian *continueth still the march, and stayeth not; the* Lacedemonian *returneth vpon the enemy, and so looseth ground in marching.* Agesilaus *after victorie gotten against the* Argives, *against whom he stood in the right winge, hearing that the* Thebans *had beaten the* Orchomenians *in the left winge, vsed the* Lacedemonian *Countermarch against them. The words of* [x] Xenophon *sound thus:* Here the strangers were about to crowne *Agesilaus* (thinking he had got the victory) when newes was brought that the *Thebans*, after they had broken the *Orchomenians*, had forced a passage as farre as the baggage. Then *Agesilaus*, countermarching his *Phalange*, led against them.

See Leo cap. 12. §. 95.

x Xenophilist. græc. lib. 4. 519. C.

The

The *Thebans* perceiuing their Confederates were fled vp to the mount *Helicon*, cloſed their troupes together, as neare as they could, ſeeking to open a way by force, and to get vp vnto them. *Ageſilaus* albeit he might by giuing way to the formoſt haue followed them at heeles, and charged the reare, yet did he it not, but met the *Thebans* front to front. Thus encountring, and claſhing their Targets together they fought, thruſt on, killed, and were killed. In fine ſome of the *Thebans* broke thorough to *Helicon*; other ſome, as they ſought to eſcape, were left dead on the place. *Ageſilaus here followed the chaſe vpon the* Argives *toward the mount* Helicon: *The* Thebans *vpon the* Orchomenians *the contrary way towards the enemies Campe. The* Thebans *ſeing their confederates fled to the mount* Helicon, *returned toward them,* Ageſilaus *countermarched to meete them, met them, and fought with them. For the Countermarch he vſed, I make account it was the* Lacedemonian, *himſelfe being a* Lacedemonian. *And he vſed it to meet the* Thebans *brauely in front. The ſame* Ageſilaus, *after he had by night incamped in a peece of ground behind* Mantinea *incompaſſed about with mountaines,* perceiuing the next morning, that the *Mantineans* gathered together vpon the toppes, that lay right ouer the head of his Reare-gard, determined to lead his Armie out of the place with all ſpeed. Now if himſelfe ſhould lead, he feared the enemy would giue vpon his Reare. Therefore ſtanding ſtill, and turning his armes againſt the enemy, he commanded the laſt of the *Phalange* to march backe againe from the Reare, and come vp to him; and ſo at once he brought his Armie out of the ſtreights, and made it by little, and little ſtronger. When the *Phalange* was thus doubled, he proceeded in that order into the *Champeigne*, & there againe reduced the depth of the armed foote to 9 or 10 men in euery file. *This place of* Xenophon, *if it be not corrupted, is very obſcure. And I cannot tell whether to take it for* doubling *of the front, or the* Macedonian countermarch. *The words make for a doubling. For* Xenophon *ſaith plainely,* the Phalange was doubled. *Beſides he addeth,* it was made by little and little ſtronger; *which could not be done with a Countermarch. And that a deepe* Phalange, *or* Hearſe, *(ſuch as this by the euenings march, and the ſtraights it entred, ſeemeth to be) is made ſtronger by doubling the front, there is no queſtion. On the other ſide, the ſtreights, thorough which it was to paſſe, perſwade me, it ſhould be a* Macedonian Countermarch. *For in doubling the front the length ſtill increaſeth; & the manner is not to inlarge, but to extenuate the front, when an Armie is to be conueighed thorough a narrow place. And* Xenophon *ſaith expreſly, that* Ageſilaus *led it thorough the ſtreights into the Champeigne in that order, to which it was reduced laſt; & that in the Champion the depth of the Armed was leſſened, and brought to 9 or 10; for there* Ageſilaus *imbattailed his Phalange to receiue the enemy, if he would charge. And in a march through ſtraight waies the front is commonly narrowed, and proportioned to the way; but in open ground the Phalange is againe brought to the iuſt length. So that it ſeemeth the depth was much, before it came into the plaine; becauſe in the plaine it was brought to 9 or 10 men, and therefore no doubling. Laſtly* Ageſilaus, *(and the front I doubt not of the Phalange with him) turned face to the enemy, before the Reare came vp to him. which is done in no other motion, than the* Macedonian countermarch. *In which all the File-leaders firſt turne about their faces toward the enemy, and then the whole battaile marcheth againſt the File-leaders, and placing themſelues orderly behind them, turne their faces the ſame way, that they haue done before. Now where it is in* Xenophon, *that* Ageſilaus *hauing gained the* Champeigne, *extended his Armie to 9 or 10 Targeteres, I ſuſpect a fault to be in the number of 9; and that it ought to be read 8 or 10. To extend a* Phalange *is to draw it out in length. the length is the ſpace betwixt the point of both wings. When he ſaith he extended it to*

Xenoph. hiſt. græc lib. 6. 605. D.

10,

10, *the meaning is he drew it out ſo farre in length that he left but* 10 *in depth. Ten is the* decas, *whereof I ſpoke before, and I haue likewiſe noted, that the* Lacedemonians *for the moſt part, made the depth of their battaile* 8. *The number of* 9, *as all other vneuen numbers, was reiected by the* Tacticks, *as vnfit for doublings. So that mine opinion is that* Xenophon *at the firſt wrote* 8 *or* 10, *not* 9 *or* 10, *howſoeuer* 9 *be crept into the place of* 8. *But to returne to* Ageſilaus, *admit he vſed doubling of ranks, or of the front in retiring out of the* Mantinęan ſtraights, *yet giue me leaue to be of opinion, that the* Macedonian Countermarch *had beene the fitteſt motion for that purpoſe. For himſelfe being thereby caſt in the reare, he had both preuented the charge of the enemie (which he feared) and yet wounde better out of the ſtraights, the long* Herle, *which ſtill remained in the* Macedonian Countermarch, *being more proportionable to iſſue out of a narrow place, then a broad-fronted* Phalange, *which ariſeth out of doubling the front.*

3 The Perſian is the Cretan or Choræan] *This* Countermarch *is called the* Perſian, *and* Cretan, *becauſe it was vſed amongſt the* Perſians *and* Cretans. *And it was termed the* Choręan *alſo, of the ſimilitude it had with the ſolemne* Græcian *dances vpon ſtages; the company, that ſhewed themſelues in ſuch dances being called* Chorus. *Who in their daunces ordered themſelues into files, and ranks, as ſouldiers doe in battaile, and mouing forward to the brinke of the ſtage, when being ſtraightned by the place, they could paſſe no further, they retired one through the ranks of the other, exceeding not the bounds of the place, as is done in this* Countermarch. *The other two kinds of* Countermarch *changed the ground, they had before. The* Macedonian *tooke the ground before the front; The* Lacedemonian *the ground after the reare. The* Choræan *holdeth the ſame ground, & beginneth the motion with the File-leaders, who notwithſtanding proceede no further, then thither, where the Bringers-vp ſtood, their files following them, & euery ſouldier keeping the ſame diſtance, he had before the mouing. The figure ſhewes the manner of it.* [h] *Theſe* Countermarches *by file, are to be made, when the enemy appeares in the reare, and commeth to charge vs. And they are made to the end, to bring our beſt men, that is the File-leaders to the incounter. Wherein notwithſtanding there is a* caution *to be held, that if the enemy be very neare, or ſo neare, that we cannot conueniently* counter-march, *before he come vp to vs, we forbeare, leſt we fall into diſorder, and in diſorder be eaſily defeated. In which caſe the beſt remedy is to turne faces about, and ſo receiue him. Hitherto of* Countermarches by file.

h Xenoph. de rep. Lacedem. 686. E.

See Leo cap. 18. §. 39.

4 Countermarches by ranke are made] *The ends of* Countermarches *by* ranke *are two in* Ælian: *one to ſtrengthen the middeſt of the battaile; the other to ſtrengthen the wings. If the ſtrength of the enemies battaile, lie moſt in the middeſt, reaſon of Warre would, that we ſhould oppoſe our greateſt ſtrength againſt the middeſt. If in the wings againſt the winges. There is an other cauſe of ſtrengthning the winges, namely if the enemy be ready to charge either of them: and this ſtrength* Ælian *would haue giuen by the* Countermarch *of our beſt men into the winges. It ſhall not be from the purpoſe to make all plaine by an example or two.* [i] Herodotus *reporteth, that* before the battaile of Platæa betwixt the Græcians, and the Perſians, it was agreed betwixt the Athenians, and Lacedemonians, that where the Athenians had vanquiſhed the Perſians in the battaile of Marathon, and had lately ſlaine Maſiſtius the Generall of the Perſian horſe; and by thoſe incounters had good experience of the Perſian manner of fight; and where the Lacedemonians were imbattailed in the right *wing* againſt the Perſians, the Athenians in the left *wing* againſt the Thebans, and other Græcians, that tooke part with the Perſians: they ſhould change, and the Athenians haue the right wing, the Lacedemonians the left.

i Herodot. in Calliope 248. & Plutarch. in Ariſtide.

Theſe

Theſe newes were caried to *Mardonius* the Generall of the Perſians; who whether fearing the Athenians, or deſirous to fight with the Lacedemonians, changed his place from the left into his right wing, to the intent to oppoſe againſt them; which when *Pauſanias* ſaw, he returned to his right wing, and *Mardonius* to his left, the place, which he had at the beginning. *Here are changing wings on both parts; The one coueting to fight in the left wing, the other deſirous to fight in the right. The* Countermarch *by ranke from the right wing would haue fitted* Pauſanias: *as the contrary* Countermarch *would haue fitted* Mardonius. *Yet am I led to thinke that* Pauſanias *vſed a* wheeling *of his battaile, and ſo conueighed it from one wing to an other behind the battaile of the ether* Græcians, *to the end, that being ſhadowed by them, hee might the better hide his purpoſe from* Mardonius. *An other example I finde in* Livy *and* Polybius *both. It is this:* [k] Pub: Scipio, who was afterward called Africanus, and *Aſdrubal* the ſonne of *Giſgo*, being incamped neare together in Spaine brought daily out of their Campes their Armies one againſt an other. And after they had long ſtood waiting, who ſhould begin the fight, which was done at neither hand, they conveighed them backe againe. The manner of their imbattailing was this. The Romans, and likewiſe the Carthagineans mingled with the Africans, had the middle, their Confederates the wings. The opinion was they ſhould fight in that order. *Scipio* when he perceiued this to be firmely beleeued, the day before he ment to fight, made an alteration of all. When night came, he gaue the word thorough the whole Campe, that horſe, and men ſhould dine, before it was light day, and that the horſemen in Armes ſhould keepe their horſes bridled, and ſadled. The day was ſcarſe ſprunge, when he ſent his horſe, and light-armed to beat in the Carthaginean Gardes, himſelfe ſtreight followed with the armed Legions; diſpoſing the Romans (contrary to the ſetled opinion of his owne people, and of the enemy) in the wings, and receiuing the Allies into the middeſt. *Aſdrubal* raiſed out of his bed with the cry of his horſemen, had no ſooner leaped out of his Tent, and ſeing the tumult before the trench of his Campe, and the amazednes of his people, and the Enſignes of the Legions ſhining a farre of, and the field full of enemies, preſently ſent out his whole power of horſe to vndertake the Roman horſe. Himſelfe iſſued out of the Campe with his foote, not changing any thing of his wonted manner of imbattailing. The fight of the horſemen had now a long time beene doubtfull, and could not bee tried, becauſe ſtill, as they were beaten (which hapned a like to both) they found a ſafe retreat within the battailes of foote. But when the Armies were come within 500 paces one of an other, *Scipio* giuing a ſignall of Retreat, and opening his battaile, receiued all the horſe, and light-armed into the middeſt, and diuiding them into two parts, placed them as ſeconds, behind the wings. Now when time was come to begin the fight, he commanded the Spaniards, who had the middle ward, to march on leaſurely, and ſent a meſſenger from the right winge (for hee commanded there) to *Syllanus* and *Martius*, willing them to ſtretch out the left winge, as they ſaw him ſtretch out the right; and to charge the enemy with the light-armed, and horſe, before the middle wards might be able to come vp, and ioyne. The winges being thus ſtretched out, they led with all poſſible ſpeed three *Cohorts* of foote, and three troupes of horſe a peece, againſt the enemy, beſides the light-armed, and thoſe that were receiued into the Reare, who followed a thwart. There was a great empty ſpace in the middeſt, becauſe the Enſignes of the Spaniards came ſlowly on. And now the wings were in fight, when the old ſouldiers Carthaginians and Africans, the ſtrength of the Armie, were not

k Liv. decad. 3. lib 8. 204. B. Polyb. lib. 1. 640. B.

not yet come to vſe their darts, neither durſt they runne into the wings to helpe them, that fought for feare of opening the middeſt of the battaile to the enemy, who was comming on againſt them. The winges were preſſed with a double medley. The Horſe, light-armed, & *Velites*, wheeling about their Troupes, charge their flanks. The *Cohorts* puſhed on in front, to the end, to breake of the wings from the body of the battaile. And the conflict was vnequall both in all other reſpects, and eſpecially becauſe a rable, as it were of drudges, and vntrained Spaniards, were oppoſed againſt the Roman and Latin ſouldiers. The day being now farre ſpent, the Armie of *Aſdruball* oppreſſed with the mornings tumult, and compelled to take the field, before they had ſtrengthned their bodies with meat, began to faint, and faile in ſtrength; which was the reaſon that *Scipio* lingered out the day, & made the fight ſomewhat late. For it was paſt the ſeuenth houre, before the winges of foote attached one an other: and yet the fight came later to the middle wards. So that the ſcorching heat of the *ſouth-ſunne*, and the *labour of ſtanding armed*, and *hunger*, and *thirſt*, firſt afflicted their bodies, before they came to hands with the enemy. Therefore they ſtood leaning vpon their Targets, and being weary both in body, and minde, they gaue backe at laſt; keeping notwithſtanding their array no otherwiſe, than as if the battaile being yet entire, had retreated at the commandement of the Generall. But when the victors, perceiuing them to ſhrinke, ſo much the more eagerly preſſed on, the brunt could hardly be indured any longer. And although *Aſdrubal* reſtrained, and ſtopped them, that gaue ground, crying that hills and a ſafe place of retreat was at their backs, if they could be but intreated, to retire eaſily; yet feare ouercomming ſhame, and the enemy killing them that were next to hand, they forthwith turned their backs, and vniuerſally powred out themſelues into flight. *This ſtratagem of* Scipio *reſteth principally in ſhifting* his beſt men *(the Romans)* into the winges; *the Spaniards* his worſt into the middeſt, *and in* keeping the Spaniards aloofe from ioyning; *and in* haſting to try the day *with the Romans againſt the weakeſt of the enemy*. Aſdrubals *way to meete with this* ſtratagem *had beene to countermarch by ranke halfe his* Carthaginians, *and* Africans *into one winge, and halfe into the other. And by that meanes his* Spaniards *ſhould haue had the middeſt againſt the* Roman-Spaniards, *and his old ſouldiers* Carthaginians *and* Africans *beene oppoſed in the wings againſt the* Romans, *and* Latins, *and the aduantage eluded, that* Scipio *ſought.*

As the Countermarches by file *were of three kindes, ſo are the* Countermarches by ranke; *namely the* Macedonian, *the* Lacedemonian, *and the* Choręan. *The* Macedonian *beginneth to moue at the corner of the wing, which is neareſt to the enemy, the enemy appearing to either flanke. And therefore incurreth the ſame imputation, that was laid vpon the* Macedonian countermarch by file; *as ſeeming to runne away, becauſe it diſmarcheth from the enemy. Yet is there vſe of it, as well as of that by* file. *For by this* countermarch *you may ſet the ſtrongeſt part of your Armie againſt the enemy, and apply the weakeſt to ſome Riuer, Lake, hill, or ſuch like, ſo that the enemy can not come to incompaſſe it. It taketh the ground that lyeth on the ſide of the contrary wing. The* Lacedemonian *taketh the ground that lieth on the ſide of that wing, which is toward the enemy, and bringeth the beſt men to be formoſt againſt the enemy: And therefore beginneth the moving on the contrary ſide. The vſe of it is, when your forces are ſuch as are able to incounter the enemy, and you deſire to bring your beſt men to fight. The* Choręan *keepeth the ſame ground, the battaile had at firſt, & bringeth one wing to poſſeſſe the place of the other; Or elſe the Sections to poſſeſſe the place of the wings, as might haue*

beene

beene done in the laſt example cited concerning Scipio and Aſdrubal. The manner of countermarch by ranke is contrary to the countermarch by file. In countermarch by file the motion was in the depth of the battaile, and either the front remoued toward the reare, or the reare toward the front, and tooke one an others place. In this the motion is in length of the battaile flanke-wiſe; the wing either marching into the middeſt, or elſe cleane thorow to the other wing. In doing it the ſouldiers, that ſtand vttermoſt in the flanke of the wing, muſt moue firſt to the contrary wing, and the reſt of euery ranke ſeuerally follow them in order. The figure will ſhew the manner of the motion. Patritius vtterly miſtaketh the countermarch by ranke; and groundeth himſelfe vpon a wrong principle, namely that in all Countermarches the File-leaders muſt march toward the reare, and the Bringers-vp towards the front. And therefore in changing the winges into Sections, he makes the winges to fall of behind in the reare (the File-leaders wheeling about) and there to ioyne themſelues as neare, as the middle Section will giue leaue, and the Sections falling backe likewiſe, to ioyne themſelues to the flanks of them, that were the wings. Whereas the nature of this Euolution is clearely to leaue the File-leaders in front, and Bringers-vp in reare, as they were at firſt. And albeit the File-leaders then change their places, yet change they their place with none, but with File leaders, and the change is, but a change of hands, the right hand for the left, or the left hand for the right. For whereas the File-leaders of the right wing had before the right hand, now in countermarch by ranke, being tranſpoſed to the left wing, they haue the left hand of all the reſt of the File-leaders; as likewiſe the Bringers-vp of the other bringers-vp.

The words of Command may be theſe,

For the Macedonian Countermarch by file.

File-leaders turne your faces about (to the right or left hand).
The reſt of euery File paſſe thorow in order one after another, and place your ſelues at your diſtances after your Leaders, turning your faces about; and ſo ſtand.

For the Lacedemonian Countermarch by file.

The firſt manner.

Bringers-vp, turne your faces about (to the right or left hand.)
The reſt turne your faces about and beginning at them, that are next to the Bringers-vp, countermarch *and place your ſelues in your diſtances before the Bringers-vp, and one before an other till the File-leaders be firſt.*

The ſecond manner.

File-leaders, countermarch *to the right, or left hand, and let euery mans file follow him, and keepe true diſtance.*

For the Chorean countermarch by file.

File-leaders, countermarch *to the place of the Bringers-vp, and ſtand, and let your files follow you keeping their diſtance.*

For the Macedonian countermarch by ranke.

The right or left hand corner file, turne your faces to the right, or left hand.
The reſt of each ranke, paſſe thorough to the right, or left hand; and place your ſelues orderly behind your ſide-men keeping your diſtance.

For

For the Lacedemonian countermarch by ranke.

The first manner.

The corner file, where the enemy appeareth, turne your faces to the right or left hand; The rest of ech rankes turne your faces, and passe thorough, (to the right or left hand) and place your selues before your side-men orderly keeping your distances.

The second manner.

The right or left wing, where the enemy appeareth not, countermarch to the contrary wing, and all in the Ranks follow euery man his side man; keeping your distance.

For the Choræan countermarch by ranke.

The vttermost corner file of the right, or left wing, countermarch *into the place of the left or right winge, and stand.*
And the rest follow ranke-wise keeping their distance.

Of doubling, and the kindes thereof.

Chap. XXIX.

[1] THere are two kinds of doubling, one of *Rankes*, the other of *Depth*, or *files*: and [2] either of these double the number, or the place. [3] The length is doubled in number when of a front of 124 files we make a front (keeping the same ground) of 248 files, by inserting in the spaces betwixt file and file, some of the followers, that stood in the depth. This is done to the end to thicken the length of the battaile. If we list to recall them to their first *posture*, we are to command those, that were inserted, to *countermarch* to the place, they had before.

[4] There are, that mislike these *doublings*, especially the enemy being at hand; and would haue a shew of doubling made, without indeed doubling the *Phalange* already ordered, by stretching out the *light-armed*, and the *Horse*, on both sides of the *wings* of the *Battaile*. [5] The vse of doubling the length is, when either we would *ouer-wing* the enemy, or else our selues feare to be *ouer-winged*.

The *Depth* is *doubled* [6] by inserting the second file into the first; so that the *Leader* of the second file be placed next behind the *Leader* of the first file, and the second man of the second file be the fourth man of the first file, and the third man of the second file be the sixt in the first file, and so forth the rest, till the whole second file be ingrossed into the first; and likewise the fourth file into the third, and all the euen files into the odde.

Doubling of the *Depth* by *Countermarch* is made, either when the next *side-files* in seuerall [as in the former example the second, and the fourth, and the rest of the euen files] *countermarch* to the Reare, and place themselues behind the *Bringers-vp* of the odde files; or else the files remayning in their first place, and number, halfe of them, diuiding themselues from the other halfe, *countermarch* likewise to the *Reare*, and conveying themselues behind the other, there order themselues, and so double the depth of the *Phalange*.

If we would returne them to the first *posture*, we must recall those, that were conveyed to stand behind, to the place they had before the *Countermarch*.

Notes.

THE *former three Motions alter not the forme of the* Phalange. *For whether you turned faces, wheeled, or countermarched the* Phalange, *the depth and length remained one. The motion to be expreſſed in this Chapter induceth an other ſhape to the* Phalange; *and maketh it ſeeme a different body from that it was before, being by* Doubling *extended either in length or in depth. For* Doubling *the number of men, or the place of the* Phalange *in front, maketh the length twiſe as much, and doubling the ſame in flanke maketh the depth* double *to that it was before. For* Doubling *is nothing elſe, then making a military body twiſe as long, or twiſe as deepe, as it was before.*

1 Tnere are two kindes of doubling] *The* Doublings *are either of* length or depth; *Or (which is all one as* [n] Suidas *ſaith) of ranks or files. For ranks ſtretch out in length, files in depth. And theſe againe are diuided into two other kinds, the body being*

n Suidas *in the word* Diplaſia-ſai.

2 Doubled in number or place] *That which is here called* number, *is called elſewhere* perſons; *or* [o] *(by* Suidas) men. *It is called* perſons *in the* Inſertion *which is made to* Ælian, *I know not by whom, in the precedent Chapter of* Countermarches. *Which becauſe it lay thruſt in betwixt the deſcription of* Countermarches, *and nothing perteined to that argument, I neuer made doubt, was crept into the text. And I am rather confirmed in my opinion, becauſe I ſaw it noted with an* Aſteriske *in that* Ælian (*being of* Robortellus *Edition) which the learned* Iſaack Caſaubon *had quoted, and purpoſed to ſet forth, if vntimely death had not preuented him. I will here ſet downe the words, becauſe they differ not much from* Ælian, *and may giue ſome light to the manner of Doubling.* It is to be vnderſtood *(ſo are the words)* that a *Phalange* is doubled in *perſons*, or *place.* when we therefore take halfe the ſouldiers from the Depth, and making files of them, place them euen with the reſt in length of the front, ſo that of 124 files we make 248, this is Doubling of perſons. In like ſort we double the place with 124 files (not increaſing the number) but onely commanding ſome to turne to the Pike, ſome to the Target, till the *Phalange* be ſtretched out to a convenient length, as from 5 furlongs to 10. In the ſame manner is the depth doubled. For either one file is inſerted into an other, man for man, ſo that the ſecond File-leader becomes the follower of the firſt, and the ſecond man in the ſecond file, the follower of the ſecond in the firſt file, and ſo the reſt: Or elſe 16 men are ſo extended, that they hold as much ground in length, as 32 vſually doe. *So farre the inſertion. It followeth in* Ælian.

o Suidas *in the word* Diplaſia-ſai.

3 The length is doubled in number] *When the front hath twiſe as many files, as it had before, this is Doubling in number, or in men, or in perſons. For the perſons, or men, make the number in the files. And the files carrying an euen depth of men, and being doubled, double the number of the front, or length.* Ælian *ſpeaketh but of one kinde of doubling, namely of number, and that muſt be done in open order, as I ſaid before. For the files of 16 ſtanding in open order, if you command the* Middlemen *(as we terme them at this day, they were called in the Macedonian files the third* Enomotarchs) *to double their ranks: Theſe middle men with the hinder halfe file march vp to the front, & ſo doubling the front in number leaue yet the ſame meaſure of length. The figure ſheweth how it is done. Yet are there two other waies, when the* Phalange *ſtandeth in cloſe order, both which double the number, and place. One is when the* Middlemen *diuide themſelues, and one halfe with their followers turning their faces march out of the right flanke: The other of the left flanke of the* Phalange. *And then turning their faces againe,*

ſleeue

ſleeue *vp and ioyne themſelues in an euen line with the File-leaders in front; The other when all the* Middle *turne their faces one way and march out with their followers beyond one flanke right or left; and turning faces againe* ſleeue *vp to the front, and ſtand euen with the File-leaders. One of theſe is done, when we deſire to enlarge both the wings of the* Phalange; *the other, when but one wing. Of theſe two laſt waies, I haue ſet downe no figure, becauſe I finde them not expreſſed in* Ælian. Cleandridas *the* Lacedemonian, *vſed yet an other kinde not ſpoken of by* Ælian. [n] Polienus *telleth the ſtory thus:* *Cleandridas* making warre vpon the *Thurians*, hauing halfe as many men againe, as they, conceiuing if they had intelligence hereof, they would hardly bee brought to fight, imbattailing his *Phalange*, ſtretched it out in depth. The *Lucans* therefore, contemning the ſmall number, drew out their forces in length, with intent *to ouer-front the enemy*; which *Cleandridas* perceiuing, commanded the *followers to march vp, and ranke with their Leaders*; and by that meanes increaſed the length of his Phalange, and ouer-fronted the enemy; who being incompaſſed, and aſſailed with miſſiue weapons on all hands periſhed intirely, excepting a few, that ſaued themſelues by ſhamefull flight. *The words ſeeme obſcure to a man not acquainted with the Tacticks. There are two kinde of ſoldiers ſaith* Ælian *in a file,* Leaders, *and* followers. *All the* Leaders *are the odde of the file; as the first, the* 3. *the* 5, *the* 7, *and ſo forth: the* followers *are the euen, as the* 2, 4, 6, 8. *Thoſe that are in the ſame ranke, are called* ſide-men. *Now, ſaith* Polien, Cleandridas *willed the followers* to ſtep forward, and to ranke, and become *ſide-men* with their Leaders: *that is, he willed the euen files to* double *their ranks with the odde; and ſo extenuated the depth, but increaſed the length of his* Phalange; *by which art he ouer-fronted, & incloſed the enemy on all ſides. This way then to double ranks, or the length of the battaile, is to inſert the euen ranks man by man into the odde. All the* Doublings *that haue beene rehearſed, were* Doublings *either in* number *alone, or elſe both in* number, *and* place. *For doubling of place alone nothing is ſaid in* Ælian. *The* Inſertion *I recited, ſupplyeth this defect: ſaying,* the place is doubled with 124 files, onely by commanding halfe to turne to the Pike, halfe to the Target, till the Phalange be ſtretched to a conuenient length; as from 5 furlongs to ten; *which is as much to ſay in few words, as* to open the Phalange; *Or to* bring it from order, *to* open order. *For ſo the front poſſeſſeth double ground, to that it had before.*

[n] Polyen. lib. 2. in Cleandrida. § 4.

4 The vſe of Doubling the length is] *Two cauſes are aſſigned for the doubling of the length:* [o] *One to* ouerwing *the enemy, the other to* auoide ouerwinging *our ſelues.* Cleandridas *in the example aboue, performed both: For he both diſappointed the* Lucans *that ſought to* incompaſſe him, *and beſides* incompaſſed, and incloſed them. *The narrower the front is, it is the more in danger of ouer-fronting;* [p] *being drawne out in length it is freer from incloſing, becauſe a greater compaſſe muſt be fetched, before it can be incloſed. Yet are we to take heed, that in doubling of the front, we giue it not ſo much length that it faile in depth. The want of length, or depth is alike dangerous, and giueth aduantage to the enemy. I haue touched before, and quoted* Leo *glancing onely at his words. Now I will ſet them downe as they lye:* [q] When the thicknes or depth of the Phalange *(ſaith he)* is gathered vp and made more thinne, it behoueth not ſo to lengthen it, that it become altogether weake and without depth. For it will ſo come to paſſe, that the enemy ſhall eaſily cut it in peeces, and make a paſſage thorough it, and not onely ſeeke to incompaſſe it before, but paſſing thorough the middeſt, bee found behinde, and there indamage it. And this it behoueth a Generall, not onely to take heede, hee ſuffer not himſelfe, but alſo indeuour to put vpon his enemy.

[o] See Leo cap. 7. § 69. & 79.

[p] Xenoph Cyrop lib. 6. 168. B.

[q] Leo cap. 14. § 108.

Hitherto are the words of Leo: *ſhewing the diſadvantage of a battaile too* much thinned by doubling the length. *But* [i] Leo *elſewhere addeth an other cauſe of* doubling, *namely* to make ſhew a faire ſight of the Armie. *For the more ground it taketh in front, the more will the number appeare, and the bravery of euery man in particular diſcouered. Further* Antigonus *vſed alſo this* doubling *for a policie to beguile his enemy.*

i Leo cap. 7. 69.

[k] Polien *reporteth the fact thus: Antigonus* incamped againſt *Eumenes* with an armie inferior in number. And when meſſengers were ſent often from one to an other, *Antigonus* at the receit of a meſſenger of the enemy, commanded one of his ſouldiers to come running in, as it were out of breath, and all to be-ſullied with duſt, and to bring newes that his Confederates were come. *Antigonus* hearing the newes, leaped for ioy, and ſent away the meſſenger. The next day he led his Armie out of his trench, doubling the length of his front. When the enemy heard of their meſſenger the newes, that was brought to *Antigonus* concerning his Confederates, and ſaw the length of his battaile doubled, they imagined that the depth was anſwerable to the front. And therefore they diſlodged being afraid to ioyne with him.

k Polyen lib 4. in Antigono. §. 19.

5 There are that miſlike] *Countermarches, and* Ælians *doublings of number, are dangerous the enemy being ready to charge. Becauſe the files of the Battaile muſt be kept in* open Order *till the motions be ended; which* poſture *is not fit to receiue the* charge of the enemy, *as we ſaw out of the eleuenth Chapter. The other* two doublings *are done in* cloſe order, *whereof I made mention a little before; The one diuiding the middle men in halfe, and fleeuing them vp by the battaile on both ſides; The other fleeuing them vpon one ſide which you will, may be vſed without danger, as well when the enemy is neare, as when the fight is: in as much, as they diſturbe not the battaile, but aduance freſh aides againſt the enemy on the flanks of it.*

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6 By inſerting the ſecond file] *There are two manner of doublings of the depth or of files; one in number, the other in place. In number, when one file is inſerted into another, the Leader or firſt man of the ſecond file ſtanding behind the Leader of the firſt; the ſecond behind the ſecond, the third behind the third, and ſo forth of the reſt: Or when the euen files countermarch, and their Leaders place themſelues behind the Bringers-vp of the odde, their files following them; or (which commeth all to one) the files being whole, they diuide themſelues into two parts in the front, and halfe countermarch, and place themſelues in the Reare of the other file to file: albeit the two laſt are Doublings both in number and place, and not in place alone. The true Doubling of the place alone is not* Ælian. *The* Inſertion *whereof I ſpake, remedieth this defect alſo. There it is ſaid, that* when 16 men (that is a file) are ſo extended, that they poſſeſſe as much length as 32 ſhould doe, (that is, as 2 files) it is doubling of place. *which is nothing elſe but changing of the Souldiers* order *into* open order. *For in their* order *they haue* 48 *foote in depth; in their* open order 96 *foote in depth. In this* Doubling *of depth we muſt take heed that we make not the front of our Armie to narrow; leſt we giue oportunitie to the enemy to incircle, and incompaſſe it.* Polybius *noteth this a great fault in* Marcus Atilius Regulus, *at ſuch time as he fought with the* Carthaginians, *and was taken priſoner. His words haue this effect:* [l] The Romans ſeing the enemy order his battaile marched out againſt him full of courage. Being notwithſtanding ſomewhat appalled at, and foreſeing the Elephants violence in comming on, they ſet their *Darters* before, and placed many maniples of *Armed* behind, one after an other, and diuided the Horſe halfe into one wing, halfe into the other. Then making the whole battaile ſhorter, but deeper, then they were wont, they prouided well againſt the Elephants, but not againſt the Horſe, that farre exceeded theirs

l Polyb. lib. 1.

in

in number. Being now come to hands the Roman horſe ouerpreſſed with multitude of the Carthaginians quickly fled from either wing. But the foote of the left wing, partly anoyding the Elephants, partly contemning the Mercenaries, fell on, and charged the right wing of the Carthaginians, and putting it to flight, followed hard, and gaue chaſe euen to the trench. But of thoſe, that were placed againſt the Elephants, the firſt ſinking vnder the violence of the beaſts, periſhed being ouerturned, and troden to death by heapes. The body of the battaile remained a while vnbroken by reaſon of the depth of them, that were after placed. But when the Reare of all, incompaſſed by the horſe, was forced to turne about, and fight with them; and the other that had by force made way thorough the middeſt of the Elephants, and were now behind their backs, came vp to the freſh *Phalange* of the Carthaginians, ſtanding in good order, they were by them ſlaine. Thus fortune being contrary on all ſides, the Romans for the moſt part were troden to death by the exceſſiue might of the beaſts, and the reſt died with the darts of the horſemen in the place, where they fought. *The error of* Attilius Regulus *was in ordering his battaile too deepe; by meanes whereof it was eaſily incompaſſed, and diſtreſſed by the Carthaginian horſe.* [m] Appian *likewiſe blameth* Antiochus *for ordering his Phalange 32 men in depth, where the Macedonian Phalange ought but 16 deepe, ſhewing that by that ouerſight it was incompaſſed by the Romans, and ouerthrowne. I haue touched the hiſtorie in my notes before. Many other examples might be alledged, but theſe two are ſufficient for our purpoſe.*

[m] Appian in Syriacis 107. B.

The words of Command in doubling of the length by number.

Middle men double your Rankes to the right, or left hand.

By this Command the middle men with their halfe files march vp to the front, in the ſpaces betwixt the files, and ſtand euen with the File-leaders, and the reſt euen with the reſt of the Ranks.

Doubling of the length in place.

Stand in your open order.

One halfe openeth their files to the right hand, the other to the left, and ſtand ſix foote one from an other.

Doubling of the depth in number.

Double your files to the right or left hand.

The euen files fall into the ſpaces of the odde files.

Double your files by countermarch to the right or left hand.

The euen files countermarch, and fall behind the reare of the odde, and place themſelues lineally after them, obſeruing their firſt diſtances.

Diuide your files and double them by countermarch *to the right, or left hand.*

Halfe the files diuide themſelues from the other halfe, and countermarch *out behind the Reare, then turne their faces towards the place behind the Reare of the ſtanding files, which remoued not; then march on, and place themſelues orderly behind them file to file, then turne their faces, as at firſt.*

Doubling the depth in place.

Ranks open behind to your open order.

The broad-fronted Phalange, the deep Phalange, or Herſe, and the vneuen-fronted Phalange.

Chap. XXX.

PLagiophalanx, or the *broad-fronted Phalange*, is that, which hath the length much exceeding the depth.

Orthiophalanx, or the *deep Phalange* (commonly called the *Herſe*) is that, which procedeth by *wing* hauing the depth much exceeding the length. In generall ſpeach euery thing is called *Paramekes*, which hath length more then the depth; and that which hath the depth more, then the length, *Orthion*: and ſo likewiſe a *Phalange*.

The *Phalange Loxe*, or vneuen fronted, is that, which putteth forth one of the *wings* (which is thought fitteſt) toward the enemy, and with it beginning the *fight*, holdeth off the other in a convenient diſtance, till oportunitie bee to advance

Of Parembole, Protaxis, Epitaxis, Proſtaxis, Eutaxis, & Hypotaxis.

Chap. XXXI.

PArembole, or *inſertion* is, when placing ſouldiers before we take off the hindmoſt, and ranke them within the diſtances of the firſt.

Protaxis, or *fore-fronting*, is when we place the *light-armed* before the *front* of the *armed*, and make them *fore-ſtanders*, as the *File-leaders* are.

When we place the light-armed behind, it is called *Epitaxis*, as it were an *after-placing*.

Proſtaxis, or *adioyning* is, when to both flanks of the battaile, or to one flanke, ſome part of the hindmoſt is added, the front of them, that are added, lying euen with the front of the battaile; ſuch addition is called *Proſtaxis*.

Entaxis, or *Inſition*, is when it ſeemeth good to ſet the light-armed within the ſpaces of the files of the *Phalange* man to man.

Hypotaxis, or *Double-winging*, is when you beſtow the light-armed vnder the wings of the *Phalange*, placing them in an embowed forme; ſo that the whole figure reſembleth a three-fold gate, or doore.

How the motions of wheeling, double, and treble wheeling of the battaile are to be made.

Chap. XXXII.

IT followeth to ſhew how a battaile may be turned or wheeled, and how after reduced to the firſt poſture, or Station.

When therefore wee would accuſtome our Troupes to wheele the battaile to the

the right hand, we command the right-hand-file to ſtand firme, & the reſt of the files to turne their faces to the right hand, and to moue cloſe vp to the right hand file. Then to turne their faces, as they were at firſt: Then the hinder rankes to cloſe forward: Then the whole battaile in that cloſeneſſe to wheele about the corner-file-Leader to the right hand. This done, if neede be to reduce it to the firſt poſture, or Station, wee command euery man to turne about his face to the Target, or left hand (that is to looke the contrary way) Then to wheele about the body, that is, as it turned, cloſed, & ſerred with the front to the right hand ſo to returne it againe to the place, from whence it made the wheeling; Then the file-Leaders to ſtand firme, and the reſt to open their ranks behind; Then to turn their faces about, as they ſtood at firſt; Then the right-hand-file to ſtand faſt, and the reſt turning faces to the left hand to open their files; Then to ſtand; And laſtly to turne their faces againe to the right hand: and ſo ſhall euery man haue his firſt poſture.

But in caſe we deſire to wheele to the left hand, we command the left-hand-file to ſtand ſtill, and all the reſt to turne their faces to the left hand, and mooue forward cloſe vp to the left hand file; Then to turne their faces as they were; Then to gather vp the hinder rankes; Then to wheele the battaile to the left hand, and ſtand; and ſo is it done, that was commanded. But if reſtitution to the firſt poſture be needfull, we muſt doe, as we did in returning from the right. For euery man muſt turne about his face to the Pike; Then the whole battaile wheeling about the left-hand-corner-file-Leader muſt returne to the place, it had; Then all the file-Leaders ſtand firme, and turne about their faces, and the reſt open their rankes in mouing forward and make Alte; Then the left hand file is to ſtand firme (for it hath the place it firſt had) and the reſt turning their faces to the right hand to open their files, and moue forward, till they haue recouered their firſt diſtances; then to turne their faces as at firſt; and ſo ſhall euery man be in his firſt poſture. Now if we would wheele the battaile about, to the pike we are to make 2 wheelings to the ſame ſide, ſo will it come to paſſe that the file-Leaders ſhall in the change haue their faces turned to the Reare, where before they had them looking out from the front. But in reſtoring to the firſt poſture we command it to wheele about to the right hand; That is, we giue it two wheelings more the ſame way; So the file-Leaders will haue their faces ſet, as at firſt. Then we command the file-Leaders to ſtand firme, and the reſt to open their rankes behind; then to turne their faces about; Then the right hand file to ſtand ſtill (for it hath the right place) and the reſt turning their faces to the right hand to march on, till the former diſtances are regained; then to make Alte. So is the battaile reduced to the firſt Station.

If you would haue the battaile turne about to the Target, you are to giue contrarie directions; That is, inſtead of commanding a double wheeling to the Pike, to command a double wheeling to the Target; Then by making two turnes the contrary way, to vſe the like changes, we ſpake of before.

There is likewiſe a treble wheeling of the battaile, when it turneth thrice to the ſame hand, namely to the Pike, or Target. The double wheeling to the Pike transferreth the Souldiers face from the front to the backe of the battaile: The treble wheeling to the Pike bringeth his face to the left flanke. The treble wheeling to the Target contrariwiſe to the right flank.

Notes:

Notes.

BEfore in the 28 Chapter Ælian *diſcourſed of wheeling, and the kindes thereof. The manner, how it is to be done, is reſerued for this place. I neede not therefore remember any thing elſe, beſides the words of command.*

The words of command in Epiſtrophe.

The vttermoſt file on the right or left hand ſtand firme
The reſt turne faces (to the ſide purpoſed) and march vp to the file ſtanding firme.
Faces as you were.
Cloſe your rankes forward:
Wheele the body (to the hand appointed) and when you haue your ground, ſtand.

Returning to the firſt Poſture, or Anaſtrophe.

Faces to the right or left hand
Wheele backe the body to the ground, it firſt had.
File-Leaders ſtand firme: the other rankes open to their firſt place.
Faces about (to which hand you will)
The corner file (to which the turning was) ſtand firme, the reſt open to their firſt ground.
Faces as you were, and order your Pikes.

Periſpaſmos, *or wheeling about.*

In wheeling about, the ſame wordes to cloſe the files, and rankes, are to bee vſed, which were vſed in Epiſtrophe, *there remaineth no more, then to ſay*
Wheele about your body, to the right, or left hand.

Anaſtrophe *or returning to the firſt Poſture.*

Returne to your firſt Poſture.
The ſame forme is vſed, that was held in the former returning vnto the firſt poſture for opening rankes and files.

Ecperiſpaſmos, *or treble wheeling.*

In this motion the ſame courſe is held, that was in the wheeling; *But only that you command a treble wheeling. And the returning to the firſt Poſture, or* Anaſtrophe *is all one, but for the ſame difference.*

Of cloſing the battaile to the right, or left hand, or to the middeſt.

CHAP. XXXIII.

IF we would cloſe, or thicken the *Phalange* in the right wing, we are to command the right-wing-corner-file to ſtand ſtill, and the reſt turning faces to the Pike to aduance toward the right hand; Then to ſet their faces as they were, and to gather vp the rankes behinde. In reducing them to the firſt poſture we are to command the file-Leaders to ſtand, and the reſt turning about their faces to open their

their rankes behinde ; Then to turne their faces as they were ; Then the right-wing-corner-file to ſtand (for it hath the right place already) and the reſt proceeding on to the Target to follow their Leaders, and obſerning their diſtances to turne their faces as at firſt. A contrarie courſe is to be held in thickning the *Phalange* to the left wing.

If the *Phalange* be to be cloſed in the middeſt, the *Diphalange* on the right hand muſt turne their faces toward the Target, and the *Diphalange* on the left hand their faces toward the Pike; Then moue forward toward the middeſt of the *Phalange*; Then, after their true diſtance gained, to ſet their faces, as they were, and to gather vp the Rankes behind.

When we would reduce the *Phalange* to the firſt poſture, wee command to turne faces about; then to open the Rankes, and all to moue on, but the firſt Ranke; then to turne their faces againe, and the right *Diphalange* turning to the Pike, and the left *Diphalange* to the Target to follow their Leaders, till they haue recouered their firſt diſtances. Then to ſet their faces, as they were.

This rule is to be obſerued in all turnings about of faces, when they are made out of cloſings, that the Pikes be aduanced, leaſt they hinder the Souldier in making his turning.

The light-armed are to be taught, and exerciſed after the ſame manner.

Notes.

IN the 11 *Chapter the diſtances, that ought to bee betwixt ſouldier and ſouldier, are particularly treated of. This Chapter ſheweth, how they are to be gained, that is, how we are to proceede out of one diſtance into another. And becauſe the open order is it, that is commonly begunne withall, it is here taught how from thence to paſſe to the reſt, and to returne to it againe. The end of cloſings is ſpoken of before. In regard of* place *they are ſaid to be of two kindes: One to the wing (right or left) the other to the middeſt of the* Phalange. *I cannot expreſſe the manner better, then by ſetting downe the wordes of command, or direction, which are theſe in*

Cloſing to the right wing.

The right-wing-corner-file ſtand firme

The reſt turne faces to the Pike, and moue (according to the diſtance required) to the right hand.

Faces, as you were.

Cloſe your binder ranks forward, and order your Pikes.

Reſtoring to the firſt poſture.

File-Leaders ſtand firme.

The other Rankes, turne faces about, and open behinde to the firſt diſtance.

Faces as you were.

The right-wing-corner-file ſtand firme; the reſt turne faces to the Target, and proceede to your firſt diſtance.

Faces as you were; and order your Pikes.

Cloſing to the left wing.

It differeth not from the other, but that the mouing is to the contrarie hand.

Cloſing

Closing to the middest of the Battaile.

The right wing turne faces to the Target, the left to the Pike.
Each moue vp to the middest of the Phalange, *and stand at the distance named.*
Faces as you were.
Close the hinder rankes forward, and order your Pikes.

Restoring to the first Posture.

The first ranke stand firme.
The rest turne faces about, and open the rankes to the first distance.
Faces as you were.
The files next the middle section stand fast, and the right wing turne faces to the Target, the left to the Pike, and moue on till the first distance recouered.
Faces as you were, and order the Pikes.
We may not forget Ælians *generall rule for turning of faces out of Closings, that the* Pikes be alwaies aduanced. *For when you come vp to the closenesse required, the Pike vpon the shoulder will hardly admit turning of the face. The like falleth out when you would open from the Closing.*

The vse, and aduantage of these exercises of armes.

Chap. XXXIV.

THese precepts of turning about of faces, of wheeling, and double wheeling of the Battaile, and of reducing it to the first posture, are of great vse in suddaine approches of the enemy, whether hee shew himselfe on the right, or left hand, or in front, or in the reare of our march. The like may bee said of *Countermarches*; Of which, the *Macedonians* are held to bee the inuentors of the *Macedonian*; the *Lacedemonians* of the *Lacedemonian*; and for this cause either to haue name accordingly. The Histories witnesse, that *Philip* (who much enlarged the *Macedonian* kingdome, and ouercame the *Græcians* in battaile at *Cheronea*, and made himselfe Generall of *Greece*) and likewise his sonne *Alexander* (that in short time conquered all *Asia*) made small account of the *Macedonian* countermarch, vnlesse necessitie forced it; and that they both by the vse of the *Lacedemonian* became victorious ouer their enemies. For the *Macedonian countermarch* the enemy falling vpon the reare, is cause of great confusion; in as much as the hindermost dismarching toward the front, and making a shew of running away, it more encourageth, and emboldneth the enemy to follow. For feare, and pursuit of the enemy [ordinarily] accompanieth that kinde of *countermarch*. But the *Lacedemonian* is of contrarie effect. For when the enemy sheweth himselfe in the reare, the Leaders with their followers brauely aduancing, and opposing themselues, it striketh no small feare, and terror into their mindes.

Of the ſignes of direction, that are to be giuen to the armie, and their ſeuerall kindes.

Chap. XXXV.

WEe are to acquaint our forces both foote, and horſe, partly with the voice, and partly with viſible ſignes, that whatſoeuer is fitting be executed, and done, as occaſion ſhall require. Some things alſo are to be denounced by the Trumpet, for ſo all directions will be fully accompliſhed, and ſort to a deſired effect. The ſignes therefore, which are deliuered by voice, are moſt euident, and cleere, if they haue no impediment. But the moſt certaine, and leaſt tumultuous, are ſuch, as are preſented to the eye, if they bee not obſcured. The voice ſometime can hardly be heard by reaſon of the claſhing of armour, or trampling, and neighing of Horſes, or tumult of cariage, or noyſe, and confuſed ſounds of the multitude. The viſible ſignes alſo become many waies incertain, by thicknes of aire, and duſt, or raine, or ſnow, or ſun-ſhine, or elſe thorow ground, that is vneuen, or full of trees, or of turnings. And ſometimes it will not be eaſie to find out ſignes for all vſes, occaſions eftſoones preſenting new matter, to the which a man is not accuſtomed. Yet can it not fall out, that either by voice, or by ſignal, we ſhould not giue certaine and ſure direction.

Of marching, and of diuers kindes of Battailes fit for a March: And firſt of the right-induction, of the Cœlembolos, *and the* Triphalange *to be oppoſed againſt it,*

Chap. XXXVI.

BEing now to ſpeake of *marching* I will firſt giue to vnderſtand, that ſome kind of *march* is a *Right-induction*, other ſome a *Deduction* on the right, or left hand; And that in a *ſingle*, or *double*, or *treble*, or *quadruple-ſided-battaile*. In a *ſingle*, when one enemy is feared; In a *double*, when two; In a *treble*, when three; In a *quadruple*, when the enemy purpoſeth to giue on on all ſides. Therefore the *march* is vndertaken ſometimes in a *ſingle Phalange*, ſometimes in a twofold *Phalange*, or elſe in a threefold *Phalange*, or in a fourefold *Phalange*.

A *right-induction* is, when one body of the ſame kinde followeth another; as if a *Xenagy* lead, and the reſt follow *Xenage*-wiſe. Or a *Tetrarchy* lead, and the reſt follow according to that forme. It is ſo called, when the *march* ſtretcheth it ſelfe out into a wing hauing the *Depth* much exceeding the length.

Againſt it is oppoſed the * *Cœlembolos*, which is framed, when the *Antiſtomos* * *Diphalange* diſioyneth the Leading-wings, cloſing the *Reare* in manner of the letter V: as the figure after placed doth teach, In which the *front* is diſſeuered, & the *reare* ioyned, and knit together.

* Hollow Wedge.
* Double Phalange.

For the *Right-induction* pointing at the middeſt of the enemies battaile, the *Cœlembolos* quickly opening before ſerueth both to fruſtrate the charge of the *front*, and to claſpe in, and circumuent the *flankes* of the *right-induction*.

Further-

* Treble Phalange.

Furthermore a * *Triphalange* is to be set against the *Cælembolos*, one *Phalange* fighting against one *winge* of the *Cælembolos*; The second against the other, and the middle, and third forbearing, and expecting a time fit to charge.

Of Paragoge, or Deduction.

Chap. XXXVII.

PAragoge, or *Deduction* is, when the *Phalange* proceedeth in a *wing* not by *file*, but by *ranke*, hauing the Commanders, or *file-Leaders*, either on the right hand, which is called a *right-hand-Deduction*, or on the left hand, which is called a left-hand-*Deduction*. For the *Phalange* marcheth in a *double*, *treble*, or *quadruple-side* according to the place, and part, it is suspected, the enemy will giue on. And both the *Paragogies* beginning the fight in flanke doe make the length double to the depth. This forme of fight was deuised to teach a Souldier to receiue heedfully the charge of the enemy not onely in front, but also in flanke.

Of the Phalange Amphistomus.

Chap. XXXVIII.

* Double fronted Phalange.

THe *Phalange* * *Amphistomus* (for it is so called, because it hath two fronts, and that part of the battaile, that is set, and aduanced against the enemie, is called a front) Seeing then in this forme the middlemost are ordered backe to backe, and those in front and *reare* make head against the enemy, the one being Commanders of the front, the other of the reare, therefore it is called *Amphistomus*. It is of great vse against an enemy strong in Horse, and able to giue a hot, and dangerous charge; and principally practised against those *Barbarians*, that inhabit about the riuer *Ister*, whom they also call * *Amphippi* because they change Horses in fight.

* Horsemen that vse two horses, one spare, the other being ridden vpon.

The Horse battaile to encounter this forme hath a *Tetragonall* shape, being for the purpose diuided into two *broad-squares* (they are *broad-squares*, that haue the front twice as much as the depth) And these *Squares* are opposed seuerally against the diuisions of the foot-battaile.

Of the Phalange Antistomus.

Chap. XXXIX.

* Doulbe flanked Phalange.

THe *Phalange* * *Antistomus* is like the *Amphistomus* the forme being a little altered; so that it accustometh the souldier to resist the seuerall kindes of incursions of Horse. All that hath beene spoken concerning the former *Phalange* both for foote, and Horse agreeth with this figure also. Herein they differ, that the

the *Amphiſtomus* receiueth the charge in front, and reare, the *Antiſtomus* in flanke But aſwell in the one, as the other, they fight with long Pikes, as doe the *Alans*, and *Sauromatans*. And the one halfe of the ſouldiers in the files turne their faces forward, the other halfe backward; ſo that they ſtand back to backe. This forme hath two fronts, the one before, where the file-Leaders, the other behind, where the *back-Commanders* ſtand. And being alſo diuided into a *Diphalange* it maketh the fore-front with the one, and the after-front with the other *Phalange*.

Of the Diphalange Antiſtomus.

Chap. XL.

A *Diphalange Antiſtomus* is that, which hath the file-Leaders placed not in *Deduction* outwardly, but inwardly face to face one againſt an other, and the reare-Commanders without, one halfe in a right, the other in a left-hand *Deduction*.

This forme is vſed when the Horſe giue on and charge *Wedge*-wiſe. For the **Wedge* ſhooting foorth into a point, and hauing the Commanders following in flanke, and endeauouring to diſſeuer, and breake the front of the foote, the Leaders of the foote, foreſeeing their purpoſe, place themſelues in the middeſt with intent either to repulſe them, or elſe to giue them a thorough paſſage without loſſe. For the *Wedge* flieth vpon the foote in hope to charge the multitude in the middeſt, and to diſorder the whole battaile: And the foote Commanders conceiuing well the fury of that kinde of forme, leaue a little ſpace betwixt either front, and ſtand like walles on both ſides, and iointly turning their faces toward the middeſt, giue them a fruitleſſe, and empty paſſage.

This forme of Horſe-battaile is called a *Wedge* by *Tacticks*, which was inuented by *Philip* King of *Macedon*, who placed his beſt men before, that by them the weaker ſort might be held in, and enabled to the charge: as we ſee in a ſpeare, or in a ſword, the point whereof by reaſon of the ſharpneſſe quickely piercing maketh way for, and letteth in the middle blunt iron.

Of the Diphalange called Periſtomus.

Chap. XLI.

THe *Phalange* of the *Diphalange* **Periſtomus* proceedeth by *deduction* in a *wing*; the oblique *deduction* on the right hand hauing the file-Leaders without, the left hand oblique *deduction* the reare-Commanders within. The figure ſheweth the intent of them that fight ſo ordered. For the battaile going to charge, hauing beene at firſt *Tetragonall*, diuideth it ſelfe into two oblique wings (the right, and the left) of purpoſe to encloſe the aduerſe *ſquare-battaile*. And they fearing to bee incloſed transforme themſelues into two ſeuerall *marching-Phalanges* directing one againſt the right, the other againſt the left *wing*. *Therefore it is called* Periſtomus, *as hauing the front bent againſt the enemy both waies.*

Of the Diphalange called Homoioſtomos, *and of the Plinthium.*

Chap. XLII.

* *A double like-fronted Phalange.*

A *Diphalange* * *Homoioſtomus* is ſo named becauſe a whole file (that is 16 men) mouing by it ſelfe, another file followeth it. And it is therefore called *Homoioſtomus*, becauſe they that follow, follow in a like figure.

* *A foureſided-battaill ſquare of men and ground.*

This kinde is oppoſed againſt the *Plinthium*. * *Plinthium* is a forme of Battaile, that hath the ſides equall both in figure and number. In figure becauſe the diſtances are euery where equall; In number becauſe there are as many men in length, as in depth. In this *foure-ſided-Battaile* are none in the flankes, but armed, without Archer, or Slinger to helpe. When therefore two *Phalanges* march together, one by another, and both haue their Leaders either in a right-hand, or left-hand *Deduction* it is called a *Diphalange Homoioſtomus*.

Of the Diphalange Heteroſtomus.

Chap. XLIII.

* *A double Phalange with contrary flanks.*

A *Diphalange* * *Heteroſtomus* is that, which proceedeth by *Deduction*, hauing the Leaders of the former *Phalange* in a *right-hand-Deduction*, and of the following *Phalange* in a *left-hand-Deduction*: ſo that the battailes march counterchangeably, one hauing the Leaders in one flanke, and the other in the other: and ſo the reſt.

Againe of the Battaile called a Rhombe, and of the foote-halfe moone to encounter it.

Chap. XLIV.

THe battaile framed in forme of a *Rhombe*, was firſt inuented by *Ileon* the *Theſſalian*, and was called *Ile* after his name; and to this forme he exerciſed and accuſtomed the *Theſſalians*. It is of good vſe, in that it hath a Leader at euery corner, at the point the Captaine, of the Troupe, the reare-Commander behinde, and on either ſide the flanke-commanders. The foote battaile, fitteſt to affront this, is the *Menoides*, or *Creſſant*, hauing both the *wings* ſtretched out, and in them the Leaders, and the middeſt imbowed to inuiron and wrap in the Horſemen in their giuing on. Whereupon the Horſemen ply the foot a farre off with flying weapons, after the manner of the *Tarentines*, ſeeking thereby to diſſolue, and diſorder their circled frame of marching. *Tarentum* is a City of *Italy*, the Horſemen whereof are called *Acrobaliſts*, becauſe in charging they firſt caſt little *Darts*, and after come to hands with the enemy.

Of

Of the Horſe-battaile Heteromekes, *and of the Plagiophalange to be oppoſed againſt it.*

Chap. XLV.

THe Horſe battaile * *Heteromekes* is that, which hath the *depth* double to the *length*. It is profitable in many reſpects. For ſeeming to cary but few in ſo ſmall a bredth it deceiueth the enemy, and it eaſily breaketh his forces with the thickneſſe, and ſtrength of the embattailing, and may without perceiuing, bee lead thorough ſtraight, and narrow paſſages. * A Horſe.

The Foot-battaile to encounter it is called the *Plagiophalange*, or *broad-fronted* Battaile. For being but ſlender in *depth* it beareth foorth and extendeth it ſelfe in *length*; ſo that, albeit it be broken in the middeſt with the charge of the Horſe; yet is nothing broken, but a little of the *depth*; and the fury of the Horſe is carried not vpon the multitude of the foote, but ſtraight, and immediately, into the open field. And for that cauſe is the *length* thereof much exceeding the depth.

Of another kinde of Rhombe for Horſemen, and of the foote-Battaile Epicampios Emproſthia *to encounter it.*

Chap. XLVI.

ANother ſort of *Rhomboides* there is, whereof I need ſay no more, but that it fileth, and ranketh not. For I haue before ſhewed the vſe, and that *Ileon* the *Theſſalian* was the inuentor, and that *Iaſon Medeas* husband moſt put it in practiſe. The vſe thereof is great being directed, and lead, in the foure corners by the *Captaine*, the *Lieutenant*, and the two flanke-Commanders. It is commonly faſhioned of Archers on Horſebacke, as the *Armenian*, and *Perſian* manner is.

Againſt it is oppoſed the foote-battaile called * *Epicampios Emproſthia*, becauſe the *circumduction of the front* is like an embowing. The end of this forme is to deceiue and ouer-reach the Archers on Horſebacke either by wrapping them in the voide ſpace of the front, as they charge, and giue on vpon the ſpurre, or elſe diſordering them firſt with their wings, and breaking their fury, by ouerthrowing them finally with their rankes about the middle *Enſignes*. This kinde of Battaile was deuiſed to entrappe and beguile. For opening the middle hollowneſſe it maketh ſhew but of a few, that march in the *wings*, hauing notwithſtanding thrice as many following, and ſeconding, in the reare. So that, if the *wings* bee of power ſufficient for the encounter, there needeth no more; if not, retiring eaſily on either ſide, they are to ioyne themſelues to the bulke of the Battaile. * The hollow fronted battaile.

Of the foot-battaile called Cyrte, *which is to be ſet againſt the* Epicampios.

Chap. XLVII.

* *The conuexe-battaile.*

THe Battaile to be oppoſed againſt the *Epicampios* is called * *Cyrte* of the circumferent forme. This alſo maketh ſemblance of ſmall forces by reaſon of the conuexitie of the figure. For all round things appeare little in compaſſe; and yet ſtretched out in length, and ſingled, they proue twice as much, as they appeared to be: as is euident in pillars, which are round; and therefore in fight ſhew the one halfe, and conceale the other.

The greateſt piece of skill in embattailing, is to make a ſhew of few men to the enemy, and indeed to bring twice as many to fight.

Of the Tetragonall Horſe-battaile and of the wedge of foote to be oppoſed againſt it.

Chap. XLVIII.

* *Foure-ſquare.*

THe * *Tetragonall Horſebattaile* is ſquare in figure, but not in number of men For in *Squares* the number is not alwaies the ſame: and the Generall for his aduantage may double the *length* to the *depth*. The *Perſians*, *Sicilians*, and moſt of the *Græcians* doe affect this forme, and take it to bee eaſie in framing, and better in vſe.

* *Wedge.*

Againſt it is oppoſed the *Phalange* called * *Embolos*, or *Wedge* of foote, all the ſides conſiſting of armed men. This kinde is borrowed of the Horſe-mans *wedge*. And yet in the Horſe-wedge, one ſufficeth to lead in front, where the Foote-wedge muſt haue three, one being vnable to beare the ſway of the encounter. So *Epaminondas* the *Theban* fighting with the *Lacedemonians* at *Mantinea*, ouerthrew a mightie power of theirs by caſting his armie into a *Wedge*. It is faſhioned if the *Antiſtomus Diphalangy* in marching ioyne the front of the *wings* together, holding them open behind like vnto the letter Λ.

Of the foot-Battaile called Plœſium, *and of the winding, or ſaw-fronted foot-battaile to encounter it.*

Chap. XLIX.

THe Battaile *Plæſium* hath the *length* much exceeding the *depth*. And it is called *Plæſium*, when armed foote are placed on all ſides, the Archers, and Slingers, being throwne into the middeſt. Againſt this kinde of Battaile is ſet the *winding-fronted-battaile*, to the end that with the vnequall figure, they may traine

traine out those of the *Plæsium* to cope with the foremost of the *winding-fronted-battaile*, and by that meanes dissolue, and disorder the thickenesse of the same. And the file-Leaders of the *winding-battaile* are to obserue, and marke the file-Leaders of the *Plæsium*, that if they still maintaine their closeneſſe, and fight serred, they also incounter them in the like forme; if the *Plæsium* file-Leaders seuer themselues, and spring out from their maine force, then they likewise bee ready, to meet them man to man.

Of Hyperphalangesis, and Hyperkerasis, and of Attenuation.

Chap. L.

Hyperphalangesis, or *ouer-fronting* is, when both *wings* of the *Phalange* ouer-reach the enemies front. *Hyperkerasis*, or *ouerwinging* is, when with one of the *wings* we ouer-reach the *front* of the enemy. So that hee, that *ouerfronteth*, *ouerwingeth*, but hee, that *ouerwingeth*, *ouerfronteth not*. For they, that match not the enemy in multitude, may yet *ouerwing* them.

Attenuation or lessening is, when the depth of the battaile is gathered vp, and in stead of 16 men a smaller number is set.

Of conueying the Cariage of the Army.

Chap. LI.

THe leading of the cariage, if any thing else, is of great importance, and requireth a speciall Commander. It may bee conueyed in fiue manners, either before the Armie, or behinde, or on the one flanke, or the other, or in the middest.

Before the Army, when you feare to bee charged behind. Behind the Army, when you would leade toward the enemy. When you feare to bee charged in flanke on the contrary side. In the middest, when a *hollow-Battaile* is needfull and fit.

Of the words of Command, and certaine obseruations about them.

Chap. LII.

LAst of all wee will briefly repeate the words of direction, if we admonish, first that they ought to be short, then that they ought to be without *double-signification*. For the Souldiers, that in hast receiue direction, had neede to take heede of doubtfull words, least one doe one thing, and another the contrarie. As for the

purpoſe: If I ſay *turne your face*, ſome it may be, that heare mee, will turne to the right, ſome to the left hand, and ſo no ſmall confuſion follow. Seeing therefore theſe words *turne your face* import a generall ſignification, and comprehend *turning to the right, or left hand*, we ought inſtead of ſaying *turne your face to the pike*, to pronounce it thus: *To your Pike turne your face*, that is, we ought to ſet the particular before, and then inferre the generall. Like reaſon is, if you ſay, *turne about your face*, or *countermarch*. For theſe are alſo generall words; And therefore wee ſhould do well to ſet the particular before. As *to the Pike turne your face about*, or *to the Target turne your face about*. Likewiſe the *Lacedemonian countermarch*, not the *Counter march Lacedemonian*. For if you place the word *Countermarch* firſt, ſome of the Souldiers will happily fall to one kind, other to another kinde of *Countermarch*. For which cauſe words of double ſenſe are to be auoided, and the ſpeciall to be ſet before the generall.

Of ſilence to be vſed by Souldiers.

Chap. LIII.

BVt aboue all things ſilence is to bee commanded, and that heed be giuen to directions: As *Homere* ſpecially ſignifieth in his diſcriptions of the *Grecian* and *Troian* fights.

The skilfull Cheef-taines preſſed on, guiding with carefull eie
Their Armed troupes, who followed their Leaders ſilently.
Ton ſurely would haue deem'd, each one of all that mighty thronge
Had been bereft of ſpeach, ſo brideled he his heedfull tongue,
Fearing the dread Commanders checke, and awfull heſt's among.
Thus march't the Greekes *in ſilence, breathing flames of high deſire,*
And feruent zeale, to backe their friends, on foes to wreake their ire.

As for the diſorder of the *Barbarians* he reſembleth it to birdes ſaying.

As ſholes of fowle, geeſe, cranes, and ſwannes with necks far ſtretched out,
Which in the ſlimy fennes Caïſters *winding ſtreames about*
Sheare here, and there, the liquid skie, ſporting on wanton wing.
Then fall to ground with clanging noiſe, the fennes all ouer ring:
None otherwiſe the Troians *fill the field with heaped ſounds*
Of broken, and confuſed cries, each where tumult abounds.

And againe:

The Captaines marſhall out their Troupes ranged in goodly guiſe;
And foorth the Troians *pace like birds, which lade the aire with cries.*
Not ſo the Greekes, *whoſe ſilence breathed flames of high deſire,*
Feruent in zeale to back their friends, an foes to wreake their ire.

The words of Command.

Chap. LIIII.

Thus then are we to command.

TO your Armes.
Stand by your Armes.
Cariage away from the battaile.
Marke your directions.
Seperate your ſelues.
Aduance your Pikes.
File and ranke your ſelues.
Looke to your Leader.
Reare Commander order your file.
a Keepe your firſt diſtances. *a Before cap. 118.*
b Faces to the Pike, moue a little further, ſtand ſo, as you were. *b Before cap. 25.*
b Faces to the Target, moue a little further, ſtand ſo.
b Faces about to the Pike, moue a little further, ſtand ſo.
c Double your Depth. To your firſt poſture. *c Before cap. 29.*
c Double your Length. To your firſt poſture.
d The *Lacedemonian countermarch*. To your firſt poſture. *d Before cap. 28.*
d The *Macedonian countermarch*. To your firſt poſture.
d The *Choraan countermarch*. To your firſt poſture.
e Battaile wheele to the Pike. To your firſt poſture. *e before cap. 26.*
e Battaile wheele about to the Pike. To your firſt poſture.

Theſe precepts of the Art *Tacticke* (moſt inuincible *Cæſar*) I haue laide out to your Matie, which will be a meanes of ſafety to ſuch, as ſhall vſe them, and of the ouerthrow of their enemies.

THE EXERCISE OF THE ENGLISH IN

the ſeruice of the high and mighty Lords, the LORDS the ESTATES of the vnited PROVINCES in the Low COVNTRIES.

THE Soldiers are diuided into two kindes, *Foote* and *Horſe*. The *Foote* againe are of two kindes; *Pikemen* and *Muſketiers*.

Pikemen are armed with a head-peece, a Curace and Taſes defenſiue, and with a Pike of fifteene foote long, and a Rapier offenſiue. The Armour is all yron; the Pike of Aſhen wood for the Steale, and at the vpper end an yron head of about a handfull long with cheekes about the length of two foote, and at the butt-end a round ſtrong ſocket of yron ending in a pike, that is blunt, yet ſharpe enough to fixe to the ground. The forme thereof is expreſſed in the grauen figure.

The *Muſketier* hath a head-peece for defence, a *Muſket*, the barrell of the length of 4 foote, the bore of 12 bullets to the pound; a Bandelier, to which are faſtned a convenient number of charges for powder (ſometimes as many as 15 or 16) a lether bagge for bullets, with a pruning yron; a Reſt for the *Muſket* with an yron forke on the vpper end to ſupport it in diſcharging, and a pike on the nether end to ſticke into the ground; laſtly, a Rapier. The figure of this armour alſo is here inſerted.

Theſe ſoldiors, both Pike-men, and Musketiers, are diuided into Companies; and euery Company conſiſteth, halfe of Pikes, halfe Musketiers. The Companies are ſome more in number, ſome leſſe. Some reach to 300 men, ſome 200, ſome 100, ſome 90, ſome 80, ſome 70. Euery Company hath theſe officers of the field: A Captaine, a Lieutenant, an Enſigne, 2 Serieants, 3 Corporalls, two Drommes; and for other vſes a Clerke, a Surgion, and a Prouoſt.

Companies are compacted into Regiments; and the Regiments commanded by Coronells. Regiments conteine not alwaies a like number of Companies, ſome hauing 10, ſome 11, 12, 13, 14, 15, ſome 30 Companies and aboue. In euery Regiment are a Coronell, a Lieutenant Coronell, a Serieant Maior, all officers of the field; a Quarter-maſter, and a Prouoſt-martiall for other imployments. It ſhall not be greatly to the purpoſe to mention higher officers, then Coronells, my principall intent being no other, then to ſet downe the armes and exerciſe of our Nation in the ſaid vnited Provinces. Their armes are ſpoken of. Their exerciſe followes.

The

The Exerciſe of a foote Companie.

FIrſt both Pikes and Muskets are ordered into files of 10 deepe. The Muskettiers are ſometime placed before, ſometime in flanke, ſometimes in the reare of the pikes.

To exerciſe the motions, there are two diſtances to be obſerued.

The firſt is when euery one is diſtant from his fellow 6 foote ſquare, that is in file and ranke 6.

The ſecond is when euery Souldier is 3 foote diſtant one from the other aſwell in file, as in Ranke.

And becauſe the meaſure of ſuch diſtances cannot be taken ſo iuſtly by the eye, the diſtance of 6 foot betwixt the files is meaſured, when the Souldiers ſtretching out their armes doe touch one an others hands: and betwixt the Rankes, when the ends of their pikes come well nigh to the heeles of them, that march before. And the meaſure of 3 foote betwixt the files is, when their elbowes touch one another; betwixt the rankes, when they come to touch the ends of one anothers Rapiers.

For to march in the field, the diſtance of 3 foote from file to file is kept, and of 6 foote from Ranke to Ranke.

To order themſelues in Battaile, as alſo to goe towards the enemy, the diſtance of 3 foote in file, and ranke, is obſerued; and likewiſe to converſion or wheeling.

The Muſquettiers alſo going for to ſhoote by Rankes keep the ſame diſtance of 3 foot, but going to ſkirmiſh they goe *a la Diſbandade*, which is out of order.

There is yet another ſort of diſtance, which is not vſed, but for to receiue the enemy with a firme ſtand, and ſerueth for the pikes onely (for the Muſquettiers cannot be ſo cloſe in files, becauſe they muſt haue their Armes at liberty) & that is, when euery one is diſtant from file to file a foote and a halfe, and 3 foote from Ranke to Ranke. And this laſt diſtance is thus commanded, *Cloſe your ſelues throughly*. But it is not to be taught the Souldiers, for that, when neceſſitie ſhall require it, they will cloſe themſelues but too much, of their owne accord without command.

To begin therefore to doe the exerciſes, the Company is ſet in the firſt diſtance, to wit of 6 foote in file, and ranke, and thus is ſaid

Stand right in your files.
Stand right in your rankes.
Silence.

Theſe are the generall words of Command which are often to be vſed.

To the right hand.
As you were.

To the left hand.
As you were.

You muſt note, that when they are commanded to be as they were, they muſt returne thither, from whence they parted; and if they turned to the right hand, they muſt returne to the left, and ſo in countermarch.

To the right hand about.
To the left hand as you were.

To the left hand about.
To the right hand as you were.

To

To the right double your rankes.
Rankes as you were.

To the left hand double your rankes.
Rankes as you were.

To the right hand double your files.
Files as you were.

To the left hand double your files.
Files as you were.

With halfe files to the right hand double your Rankes.
Halfe files as you were.

With halfe files to the left hand double your Rankes.
Halfe files as you were.

Files to the right hand countermarch.
Files to the left hand countermarch.

To the right hand or left at diſcretion as you were.

Rankes to the right hand countermarch.
Rankes to the left hand countermarch.

To the right or left hand as you were.

Cloſe your Files } to 3 foote diſtance.
Cloſe your Rankes }

Vnderſtand that in Cloſing from the outſides to the middle the Soldier is to ſtand in his diſtance of 3 foote in file, and not cloſer.

To the right hand wheele.
To the left hand wheele.

Open your Rankes backwards in your double diſtance to wit at 12 foote, and this for a ſingle Company.

Rankes as you were, *ſc.* at the firſt.

In opening Rankes or Files, you muſt keepe them cloſed vntill the ſecond Ranke or File beginning from the outſides haue taken their diſtances, and ſo ſhall the reſt remaine cloſe vntill euery Ranke or File haue taken their diſtances in order.

Open your files, to wit to the firſt diſtance of 6 foote.

If you will command to cloſe files to the right hand or left hand, the outmoſt file ſtandeth ſtill, and the reſt cloſe to that file.

For the Pike with a firme ſtand.

Advance your Pikes.
Order your Pikes.
Slope your Pikes.

Charge

Charge your Pikes.
Order your Pikes.
Traile your Pikes.
Cheeeke your Pikes.

More for the Pikes firſt with a firme ſtand and then marching.

Charge your Pikes.
Slope your Pikes.
To the right hand charge your Pikes.
Slope your Pikes.
To the left hand charge your Pikes.
Slope your Pikes.
Charge your Pikes to the Reare.
Slope your Pikes.
Order your Pikes.

This muſt be obſerued charging your Pikes with a firme ſtand to ſet the right foote behind, and charging the Pikes marching to ſet the left foote before.

For the Muſquet.

THe Poſtures in his *Excellencies* Booke are to be obſerued; but in exerciſing you muſt onely vſe theſe three termes of direction.

Make ready.
Preſent.
Giue fire.

Your Muſquettiers muſt obſerue in all their motions to turne to the right hand, and that they carry the mouth of their peeces high, aſwell when they are ſhouldred, as in pruning, and alſo when they hold their pannes garded, and come vp to giue fire.

The enemy before the Vantgard.

In advancing towards an Enemy, when they doe not ſkirmiſh looſe and diſbanded, they muſt giue fire by Rankes after this manner.

Advancing.

Two Rankes muſt alwaies make ready together, and aduance ten paces forward before the body, at which diſtance, a Sergeant (or when the body is great ſome other officer) muſt ſtand, to whom the Muſquettiers are to come vp before they preſent, and giue fire, firſt the firſt ranke. And whileſt the firſt giues fire, the ſecond Ranke keepe their Muſquets cloſe to their Reſts, and their pannes garded, and aſſoone, as the firſt are fallen away, the ſecond preſently preſent, and giue fire, and fall after them.

Now aſſoone as the firſt two Rankes doe moue from their places in the front: The two Rankes next them muſt vnſhoulder their Muſquets, and make ready, ſo as they may aduance forward ten paces as before aſſoone as euer the two firſt rankes are fallen away; and are to doe in all points as the former. And all the other Rankes through the whole diuiſion muſt doe the ſame by twoes, one after another.

A manner

A manner there is to giue fire retyring from an Enemy, which is performed after this ſortt.

As the Troope marcheth the hindermoſt ranke of all keeping ſtill with the Troope is to make ready, and being ready, the ſouldiers in that ranke turne altogether to the right hand and giue fire, marching preſently away a good round pace to the front, and there place themſelues in ranke together iuſt before the front: As ſoone as the firſt ranke turne to giue fire, the ranke next makes ready, and doth as the former, and ſo the reſt. *The enemy in the Reare.*

We giue fire by the flanks thus. The vppermoſt file next the Enemy muſt be commanded to make ready, keeping ſtill along with the body, till ſuch time, as they be ready, and then they turne to the right, or left hand (according to the ſight of their enemies either vpon the right, or left flanke) and giue fire altogether. When they haue diſcharged they ſtirre not, but keepe their ground, and charge their Peeces againe in the ſame place, they ſtand. Now as ſoone as the foreſaid file doth turne to giue fire, the vttermoſt next it makes ready alwaies keeping along with the Troope till the *Bringer-vp* be paſt a little beyond the Leader of that file, that gaue fire laſt; and then the whole file muſt turne, and giue fire, and doe in all points as the firſt did, and ſo the reſt one after the other. A *Sergeant*, or if the Troope be great ſome other better qualified Officer muſt ſtand at the head of the firſt file, and aſſoone as the ſecond file hath giuen fire, and hath charged, he is to lead forward the firſt file vp to the ſecond file, and ſo to the reſt one after another, till he hath gathered vp againe the whole wing, and then he is to ioyne them againe in equall front with the pikes. *The enemy in flanke.*

Laſt of all the Troope or whole wing of Muſquettiers makes ready altogether, and the firſt ranke without advancing giues fire in the place they ſtand in, and ſpeedily, as may be, yet orderly falls away, all the rankes doing the ſame ſucceſſiuely one after another. *The enemy in front. without advancing.*

Thus much of the armes and exerciſe of the foote.

The horſe enſue.

The order and diſcipline holden in Horſe-troopes, or in the Cavalry.

THE *Cavalry* hath for his Cheife the Generall, the Lieutenant Generall, and the Comiſſary generall.

To the *Cavalry* there is a Quarter-maſter generall, and a Prouoſt generall belonging; the Iuſtice reſorteth to the Councell generall of warre of the Army.

The *Cavalry* is of two ſorts. *Harquebuſiers*, and *Curaſſiers*.

The firſt haue for defenſiue armes, the *Curace* piſtoll proofe, and a light headpeece. For offenſiue the *Carbine* of 3 foote, 3 inches length, and the bore of 20 bullets in the pound, and *Piſtolls* like vnto the *Curaſſiers*.

The *Curaſſiers* haue for defenſiue Armes a compleat armour, the *Curace* piſtoll proofe. For offenſiue two piſtolls hauing the barrell of 26 inches in length, and the bore of 36 bullets in the pound. See the figure of Armes.

For the order in Regiments the 40 Companies entertained by the States doe make eleuen Regiments.

The Regiment of the Generall hath alwaies the Vantgard, the others alternatiuely

natiuely and by turnes, and he that hath it this day, the next day after hath the Reare, the reſt following in the ſame ſort.

Thoſe which command the Regiments are called *Coronells*. The Regiments are compounded of 3, or 4 Companies (of 3 at the leaſt) and the Coronells Company marcheth alwaies on the left wing of the Regiment.

The Captaines receiue orders from their Coronells, as theſe from the Commiſſary Generall.

All the Companies are diuided in 3 equall parts, which are called Squadrons, and diſtributed to the three chiefe officers; Captaine, Cornett, and Lieutenant, hauing each of them adioyned an old Souldier, which they doe know to bee of more deſert, called a Corporall.

Marching in the field, euery Officer marcheth at the head of his Squadron, the Lieutenant excepted, which marcheth behind with the Quartermaſter; and the third Corporall at the head of the Lieutenants Squadron.

The Companies are diuided by files, and rankes, the file 5 deepe, and no more, how ſtrong ſoeuer the Company be.

They obſerue that in marching in battaile they muſt be cloſe together, and to doe the *Motions* there muſt be 6 foote diſtance from one Horſeman to another.

The Companies being in battaile, there muſt be 25 paces diſtance left between euery Company, and 50 betwixt euery Regiment at the leaſt.

The exerciſe of Armes for the Cavalry.

To open the Squadron you muſt firſt open the rankes and after the files.

To cloſe the Squadron, you muſt firſt cloſe the files, and after the rankes.

There be two ſorts of diſtances betwixt the files; the one cloſe, and the other open.

In the Cloſe there muſt be no diſtance or intervalls betwixt the files, to the open there muſt be 6 foote betwixt euery file.

Likewiſe there muſt be two ſorts of diſtances betwixt the rankes; the Cloſe, which muſt be without intervall or ſtreete; and the Open, which muſt be ſix foote diſtance.

In a march it muſt be vnderſtood, that the rankes muſt neuer be more opened, then the open diſtance of 6 foote.

And to the end that the Troope may march in good order, and obſerue well their diſtance betwixt the rankes, without that the laſt may be forced to runne or goe to faſt, there muſt be heed taken, that ſo ſoone, as the firſt rankes begin to march, all the Troope, and the Reare alſo at one time march.

The words of Command are

Open your Rankes.
Open your files.

Stand right in your rankes.
Stand right in your files.

To the right hand.
As you were.

To the left hand.
As you were.

To the right hand about.
To the left hand as you were.

To the left hand about.
To the right hand as you were.

Files to the right hand countermarch.
Files to the left hand countermarch.

To the right or left hand as you were.

Rankes to the right hand countermarch.
Rankes to the left hand countermarch.

Close your files.
Close your rankes.

To the right hand wheele.
To the left hand wheele.

Faults escaped in the Booke.

PAg. 2. in the margent beneath, for *Spartionem* read *Spartianus*. Pag. 9 lin. 20. for *was*, *were*. & lin. 31. for *Bircanna*, *Bircenna* 3 and in the marg. lin. 40. for *Dipnoseph*, *Dipnoseph*. pag. 10. lin. 26. in marg. for *Adrian*, *Arrian*. p. 14. l. 11. in marg. for *Dipnoseph*, *Dipnoseph*. p. 15. l. 18. for *Marsilians*, *Massilians*. p. 17. l. 47. for *pluimes*, *Plumes*. p. 18. l. 49. for *conceited by*, *conceitedly*. p. 20. l. 45. for *Thureo*, *Thureoi*. lin. 48. dele *full*. p. 22. l. for *Those*, *These*. l. 11. for *Ochanes*, *Ochane*. l. 32. dele *Then*. p. 23. l. 12. for *Divarates*, *Dibarates*. p. 27. l. for *immitation*, *imitation*. p. 28. l. 11. for *ἀγκυλον*, *ἀγκύλη*. l. 17. dele *That*. p. 29. l. 4. for *quiety*, *quietly*. l. 25. *slinges*, *slingers*. p. 30. l. 35. in marg. *Analast*. *Analect*. p. 31. l. 13. put in, *it*. p. 32. l. 29. & 33. for *bellys*, *bellies*. p. 33. l. 35. 38. 41. for *Sotridas*, *Soteridas*. p. 34 l. 3. for *forceble*, *forcible*. l. 19. *Pepane*, *Pepana*. 29. *vnfailable*, *vnfailible* l. 42 dele *once*, &, *for all*. p. 35. l. 42. *reduct*, *reduce*. p. 36. l. 40. in marg. *de bett*, *de bell*. p. 39. l. 17. *strok*, *strooke*. p. 44. l. 12. in marg. *Enemetis*, *Enemotis*. 24. *Enemotarchas*, *Enemotarches*. 31. 33. *Pruceites*, *Peuceites*. lin. 47. after *Patricius*, a full point. p. 49. l. 27. *Bathera*, *Batheia*. 40. *liptismos*, *leptismos*. p. 50. l. 14 after *supported*, a full point. 34. *easily*, *easily*. p. 53 l. 6. *Prataxis*, *Protaxis*. pag. 55. l. 35. for *hauing*, *giuing*. pag. 56. l. 18. *sure*, *safe*. lin. 32, 37. *Ansetans*, *Ausetans*. 41. *Then*, *They*. 46. a full point after *through*. p. 57. l. 31. betwixt *the*, and *examples*, put *former*. p. 58. l. 2. *Pharnabarus*, *Pharnabazus*. l. 18. after *Mnemachy*, a full point. 37. *the*, *them*. 48. after *number*, a full point. p. 59. l. 6. *speedely*, *speedily*. 36. *motion*, *motions*. 39 40. *your*, *you*. 41. after *forme*, a full point. p. 60. l. 16. *finth*, *fifth*. 18. after *may be*, set the figure 2. 28. after *fort*, dele *as*, and for 2 read 4. p. 61. l. 18. *never*, *neither*. p. 62. l. 23. after *Lydians*, a full point. p. 63. l. 15. for 500, 5000. lin. 22. for 800, 8000. p 66. l. 26. for 500, 400. lin 25. read, *when it is greatest in Xenophon hath no more*, *then* 100. pag. 68. l. 35. *besides*, *to pretermit*. p. 70. l. 40. *fight*, read *marching*. p. 72. l. 1. after *Sunne-set*, read, *and*. l. 37. *for*, *of*. p. 75. l. 19. & 27. *Lochagie*, *Lochagi*. l. 32. *Pempedarches*, *Pempadarchs*. p. 78. l. 2. & 4. *of*, *on*. p. 79. l. 11. for *fourth*, *third*. p. 80. l. 29. insert after, *an Army*, *that &c. moveth disorderly*. & lin. 47. after 21. insert, *foote*. pag. 82. lin. *Target*, *Targets*. lin. 30. for 6130. read 6144. pag 84. l. 14. *Philopomen*, *Philopœmen*. p. 87. l. 36. *Quintus*, *Quintius*. l. 37. after, *himselfe with*, insert, *in*. p. 88. l. 39. *sought*, *sought*. p. 90. l. 41. *they*, *those*. p. 91. l. 30. *twenty six*, *sixteene*. pag. 92. l. 29. after 1024 *men*, insert *Two Systremmata an Epistemagy of* 2048 *men*. p. 96. l. 44. after, *flankes*, insert, *and front*. p. 98. l. 37. after, *Ambushes are*, insert, *or may be*. p. 99. l. 18. for *flights*, *flights*. p. 112. l. 44. *neaner*, *nearer*. p. 114. lin. 23. read *Epistygy*. *Harmatarchy*. p. 115. l. 34. *greater*, *great*. p. 122. l. 4. *Lacedemon*. lin. 21. a comma, after, *cutting it of*. another comma, after *a sunder*. p. 124. l. 19. after *proceed*, put out, *but*. p. 130. l. 28. for *and*, *but*. p. 135. lin. *Middle*, *Middlemen*. pag. 136 l. 4. after, *particular*, insert, *be*. lin. 20. after *doublings*, insert, *which*. p. 138 l. 15. read *Entaxie*. the folio's are false pag 138. 139. pag. 142 l. 19. for Chap. 24. read 34. pag. 153. l. 23. after *Rapier*, insert *for offence*. pag. 154. l. 6. after 6, adde *foote*. lin. 32. after, *thus*, insert, *it*. pag. 155. lin. 1. after *right*, insert, *hand*.

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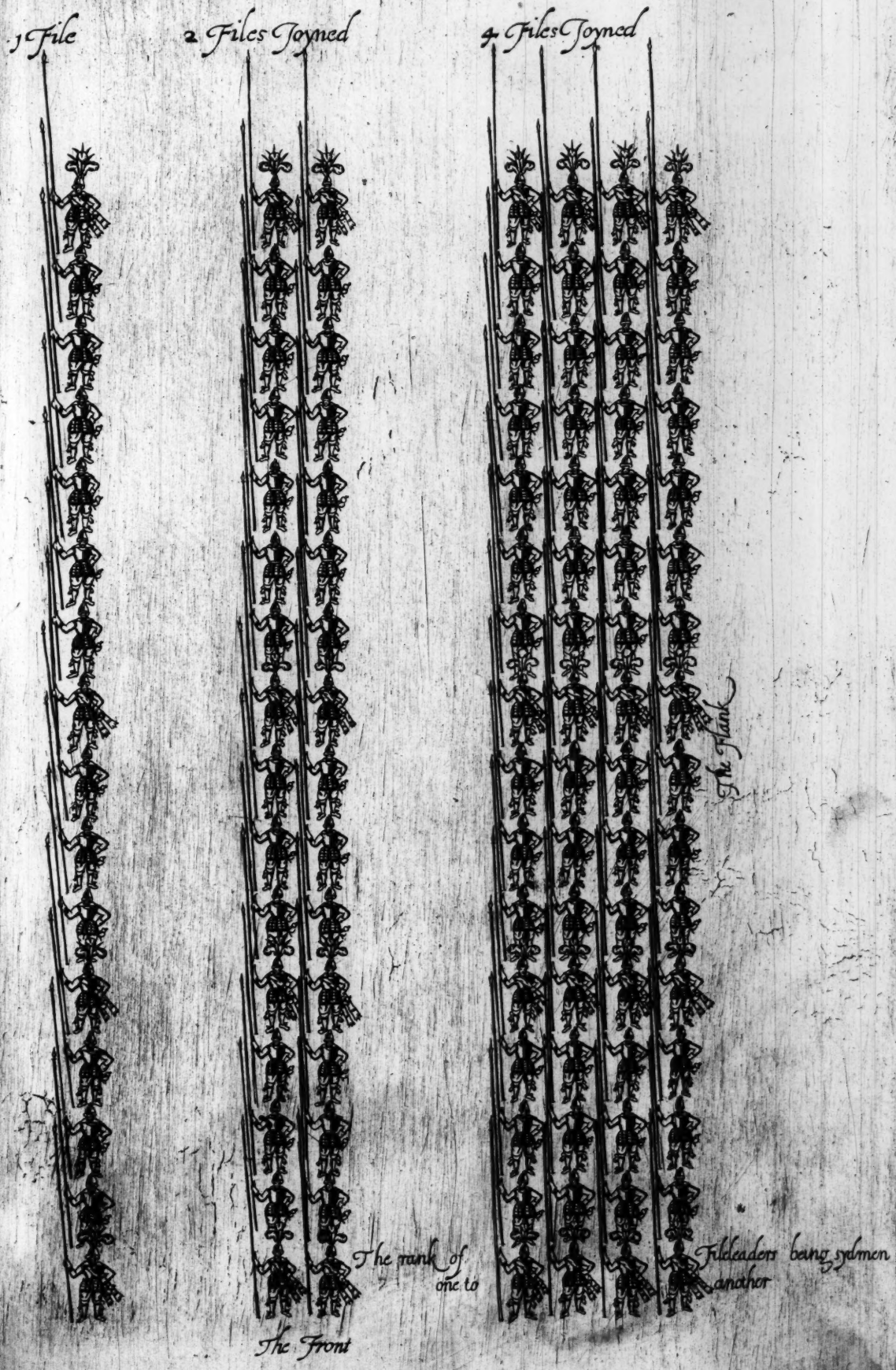

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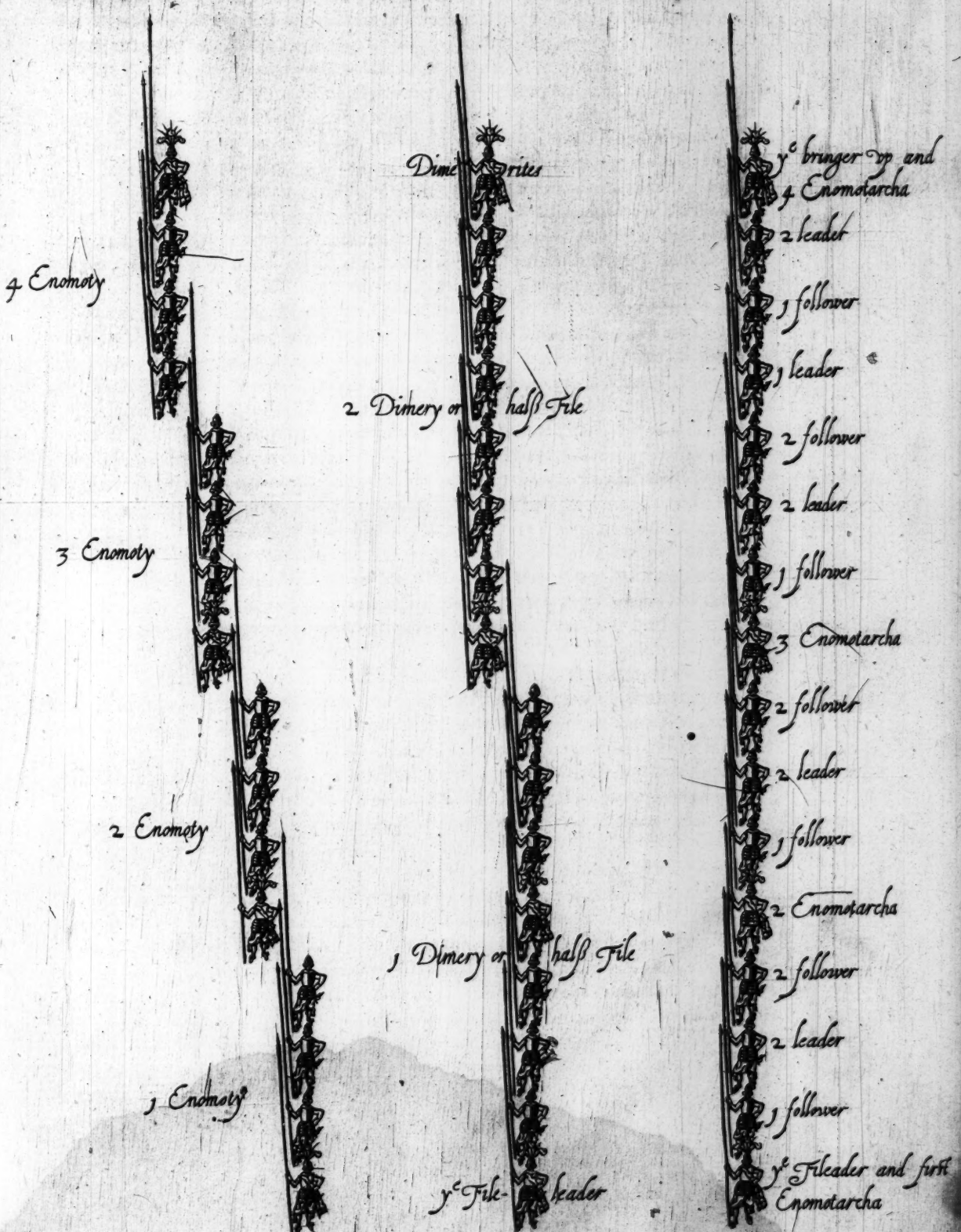
The ordering of a File



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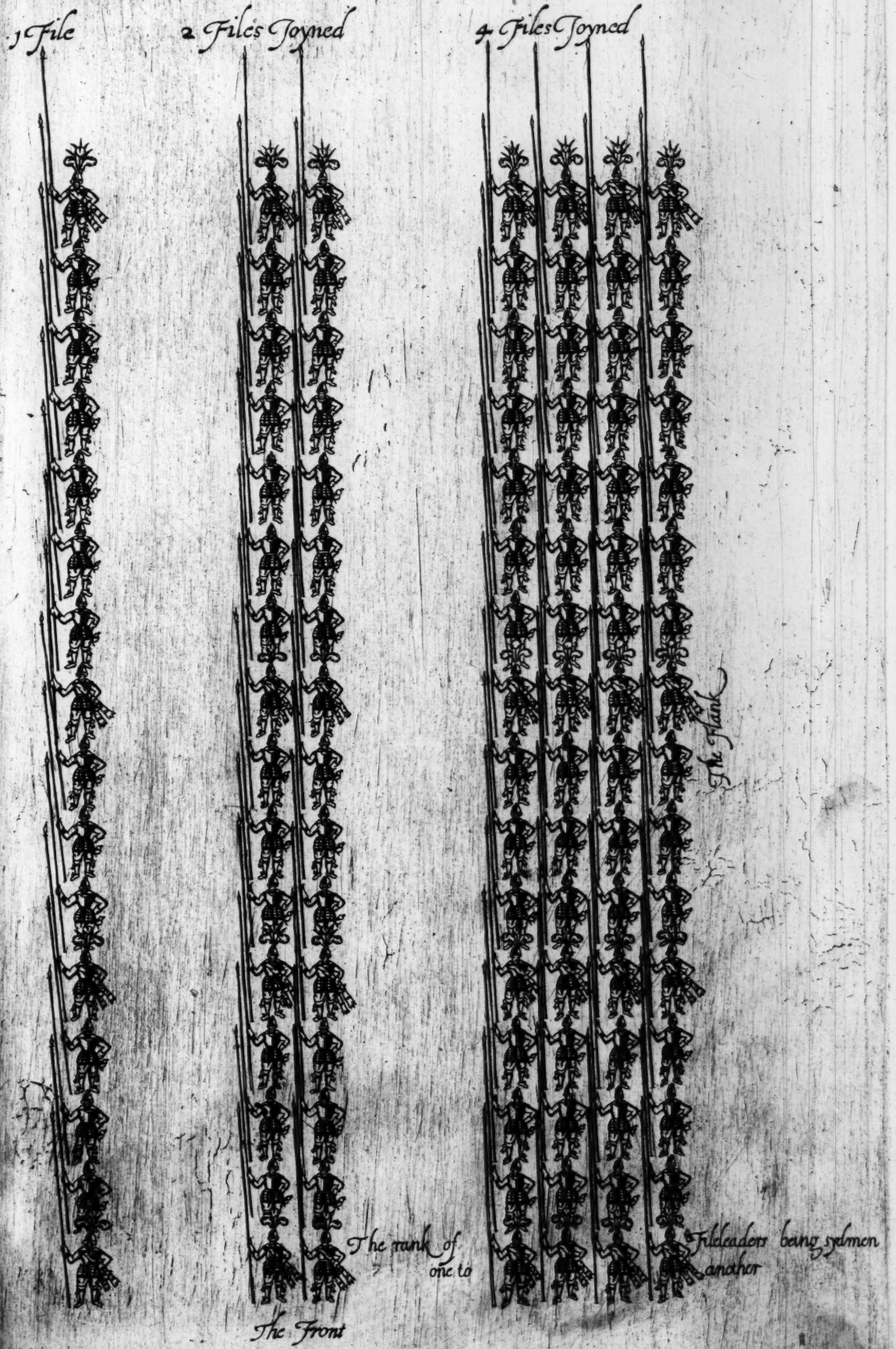
Joyning of Files



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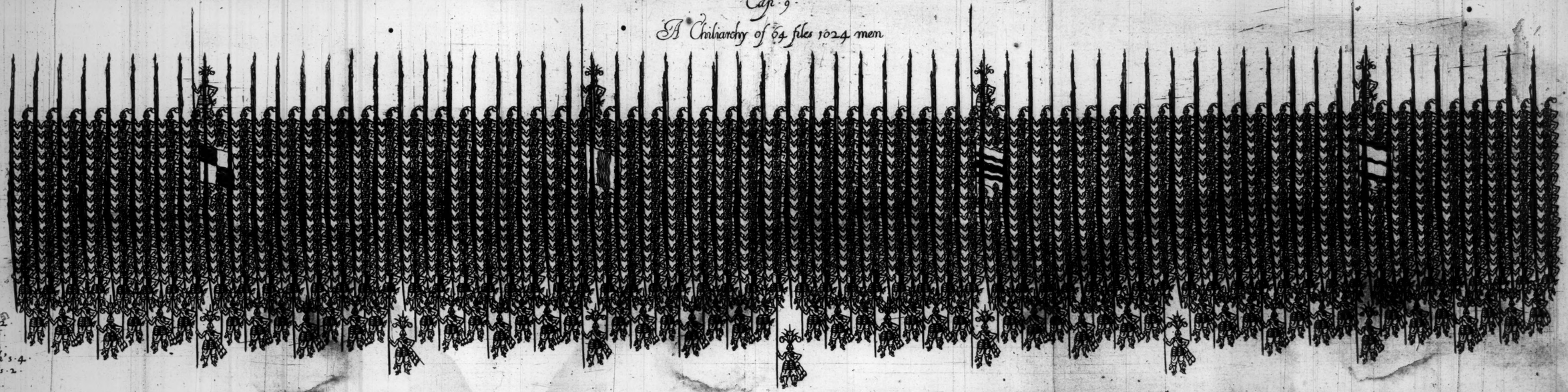
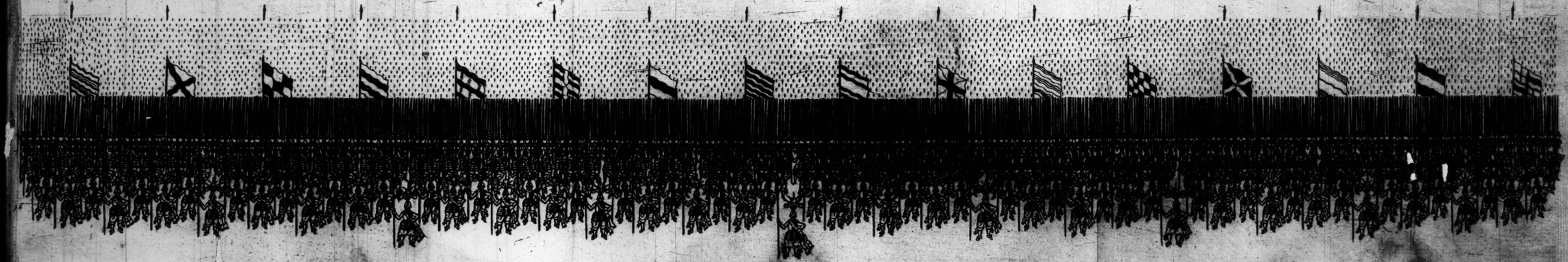
A Chiliarchy of 64 files 1024 men



Lochites · 32.
Tetrarch's · 16.
Taxiarch's · 8
Syntagmatarch's · 4.
Pentecosiarch's · 2.
Chiliarch's · 1.

Cap. 9.

A Phalangarchy of 256 files 4096 men



Cap. 9.

The Reare

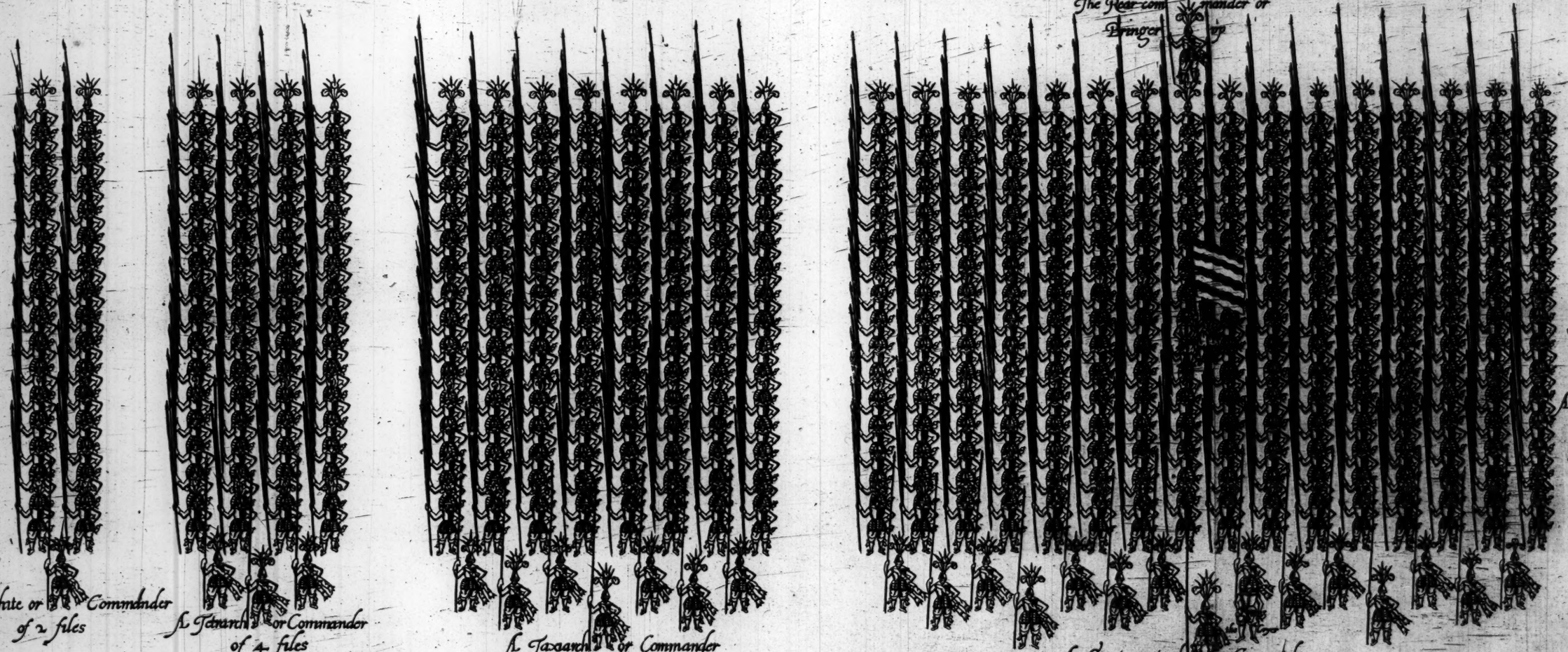
A Dilochy of 2 files 32 men

A Tetarchy of 4 files 64 men

A Taxis of 8 files 128 men

A Syntagma of 16 files 256 men

The Rear-com[illegible]mander or Bringer [illegible]p



A Dilochite or Commander of 2 files

A Tetrarch or Commander of 4 files

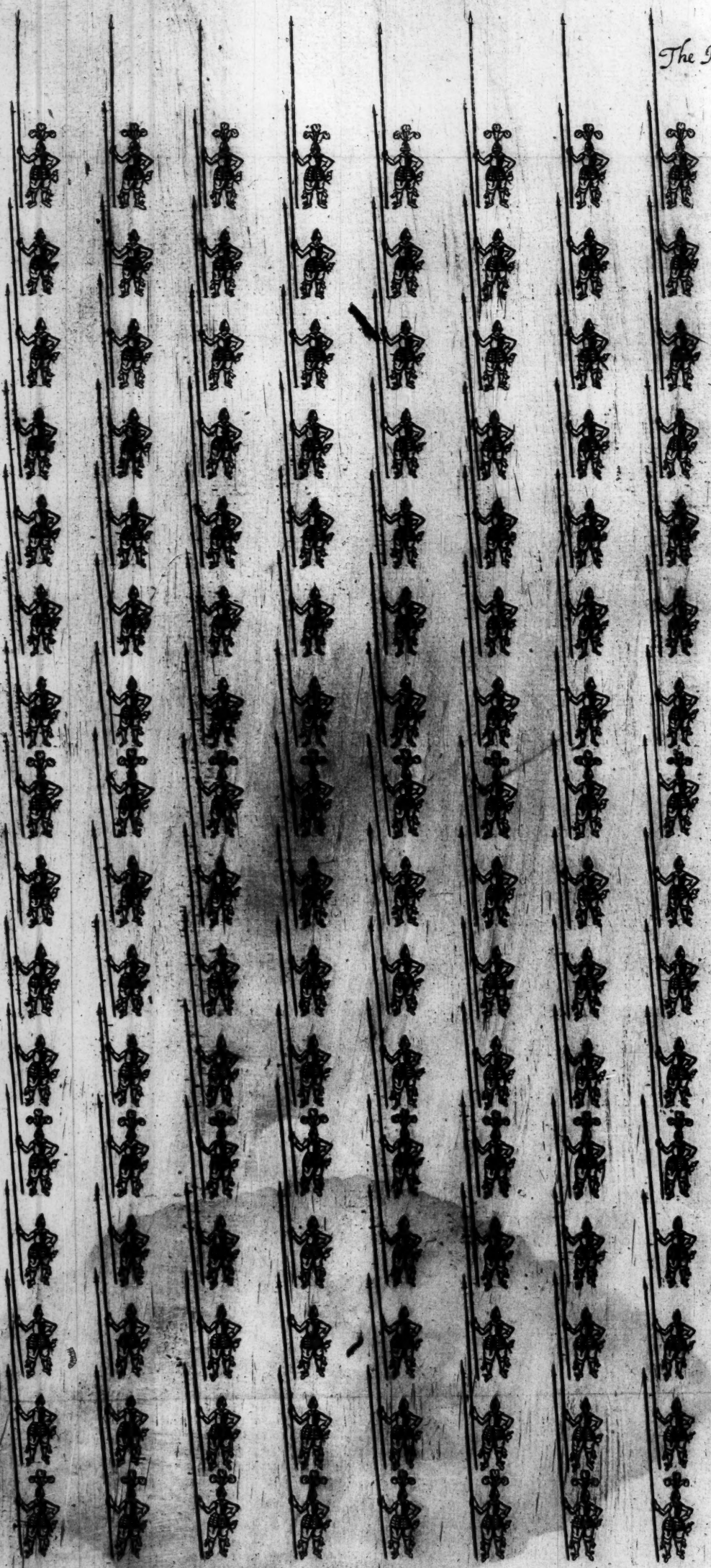
A Taxiarch or Commander of 8 files

A Syntagmatarch or Commander of 16 files

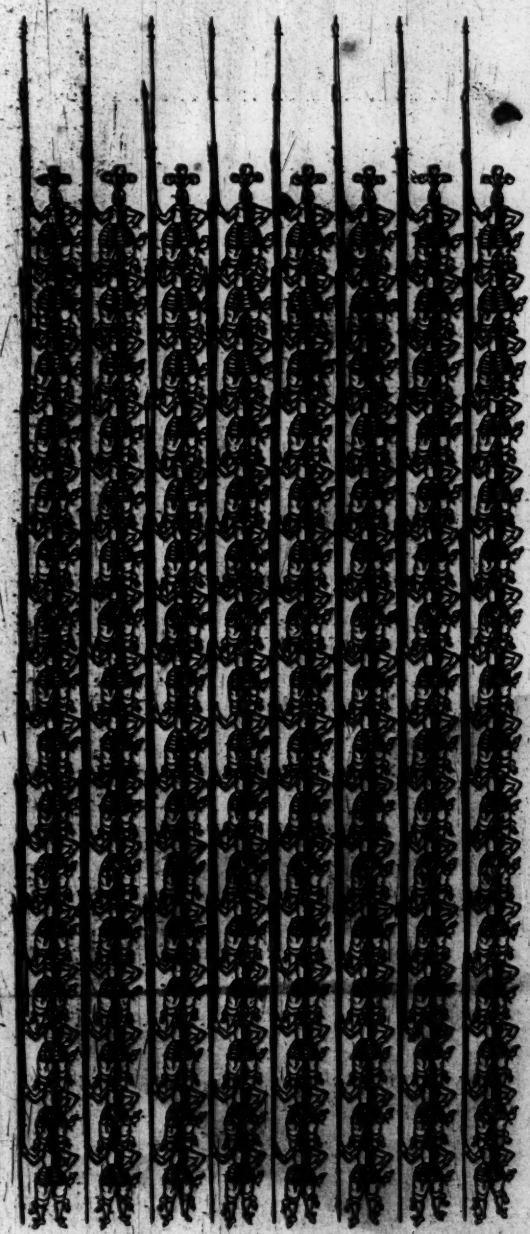
A Seriant

The first distance ordinary 6 foote
in file asmuch in ranck

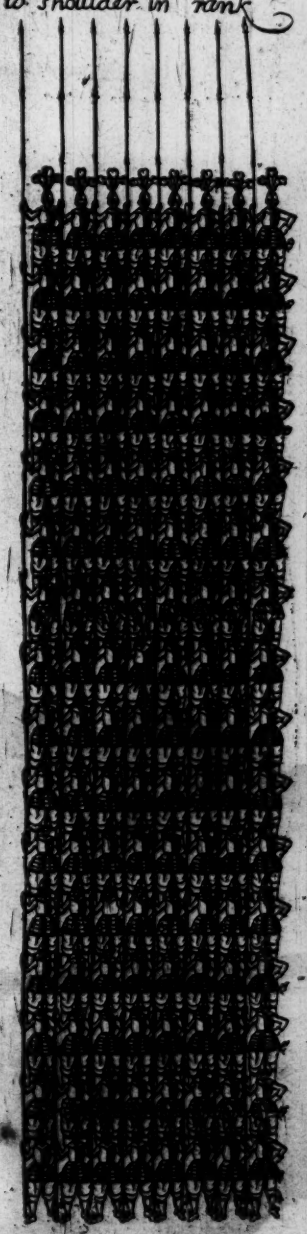
The Reare



The second distance called Closing
& foote in file asmuch in ranck



The third distance called Shutti
or Serring & foote in file Shoulder
to Shoulder in rank



The Front

Cap. 14.

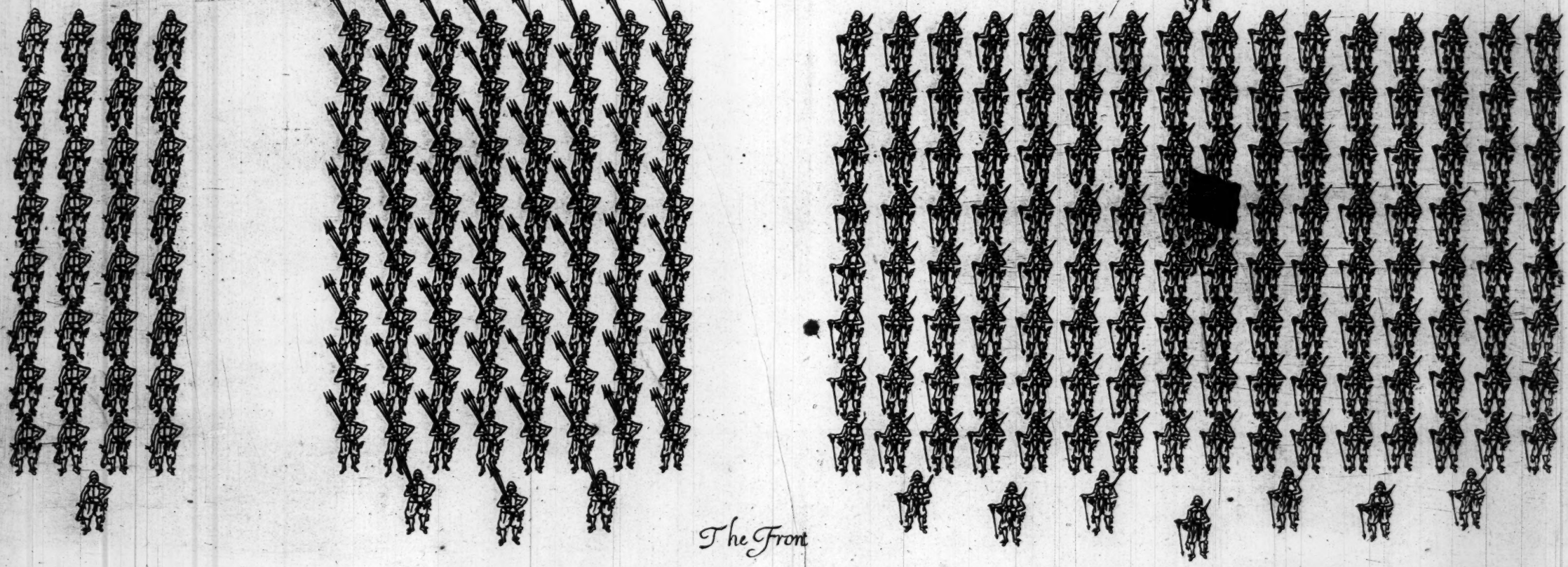
Cap. 16

A Systasis

A Pentecontarchy

The light Armed

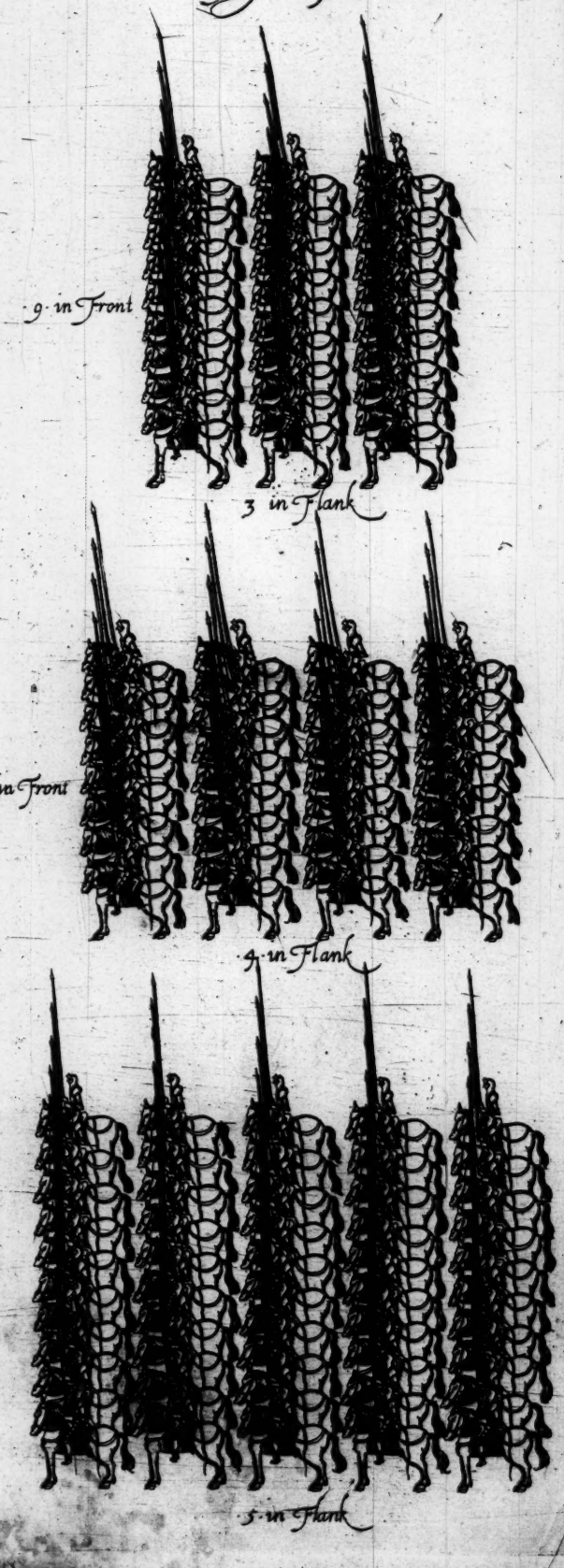
A Century



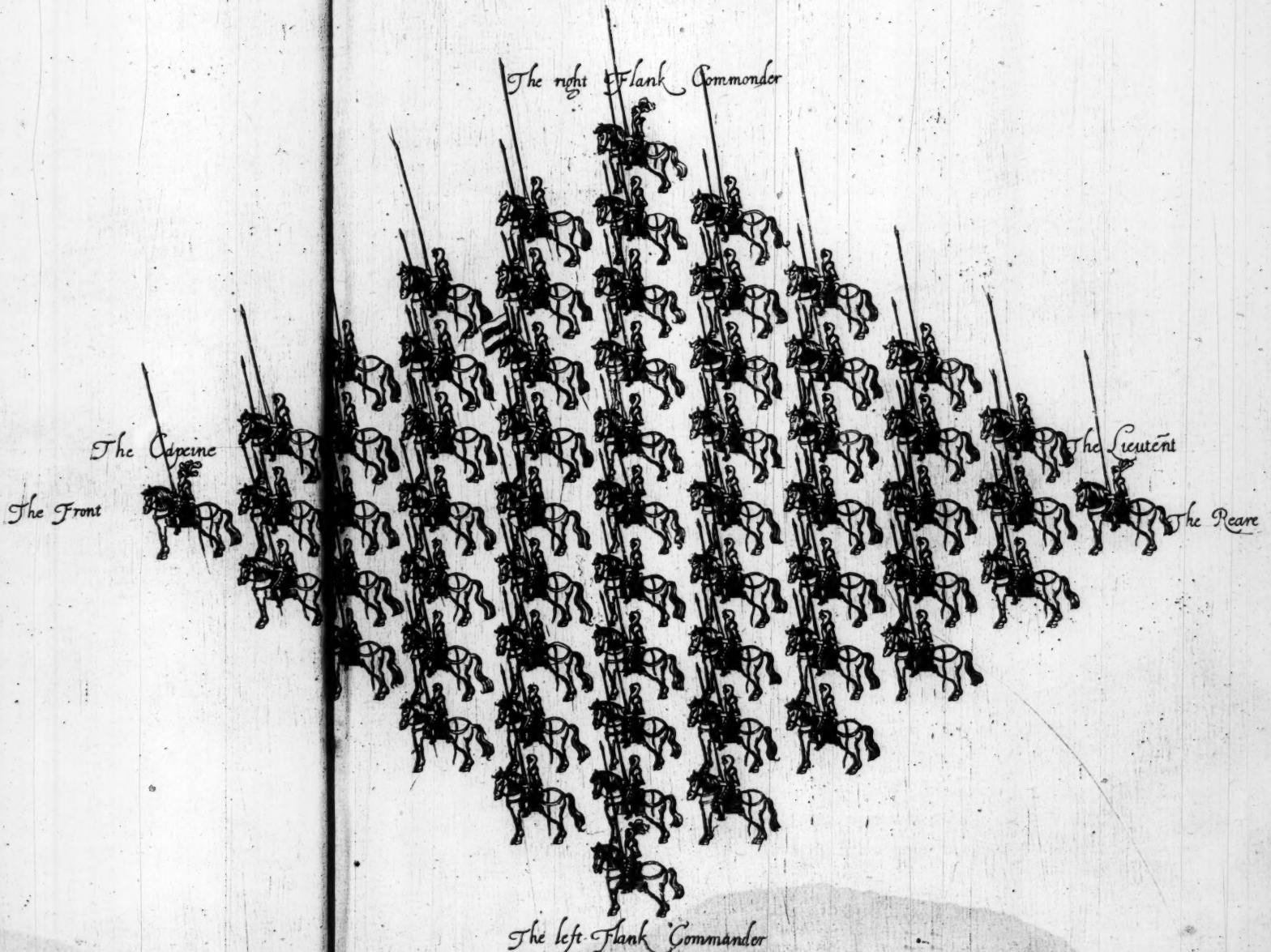
The Front

Cap. 18

The Square



A Rhombe of Horse



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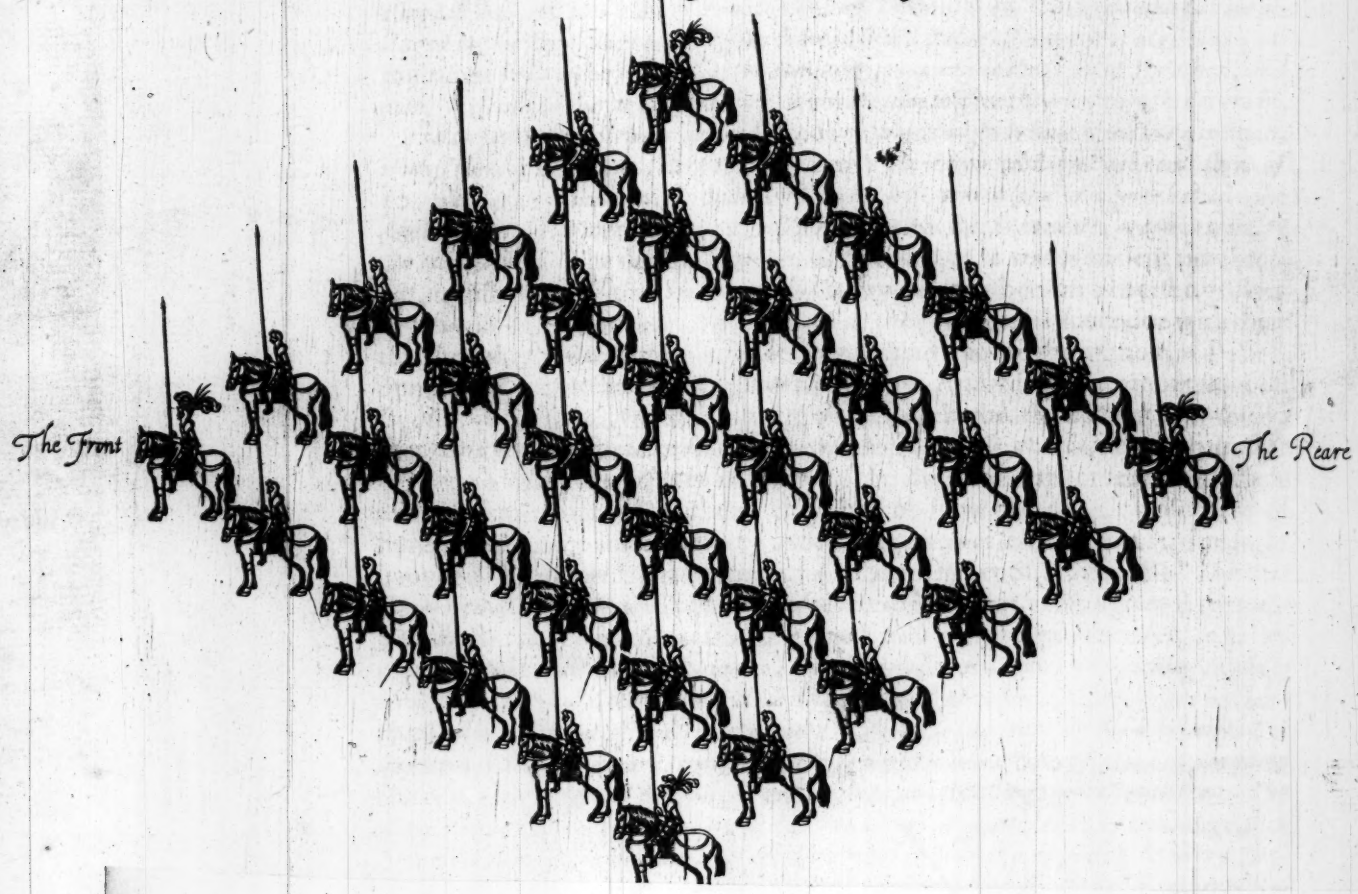
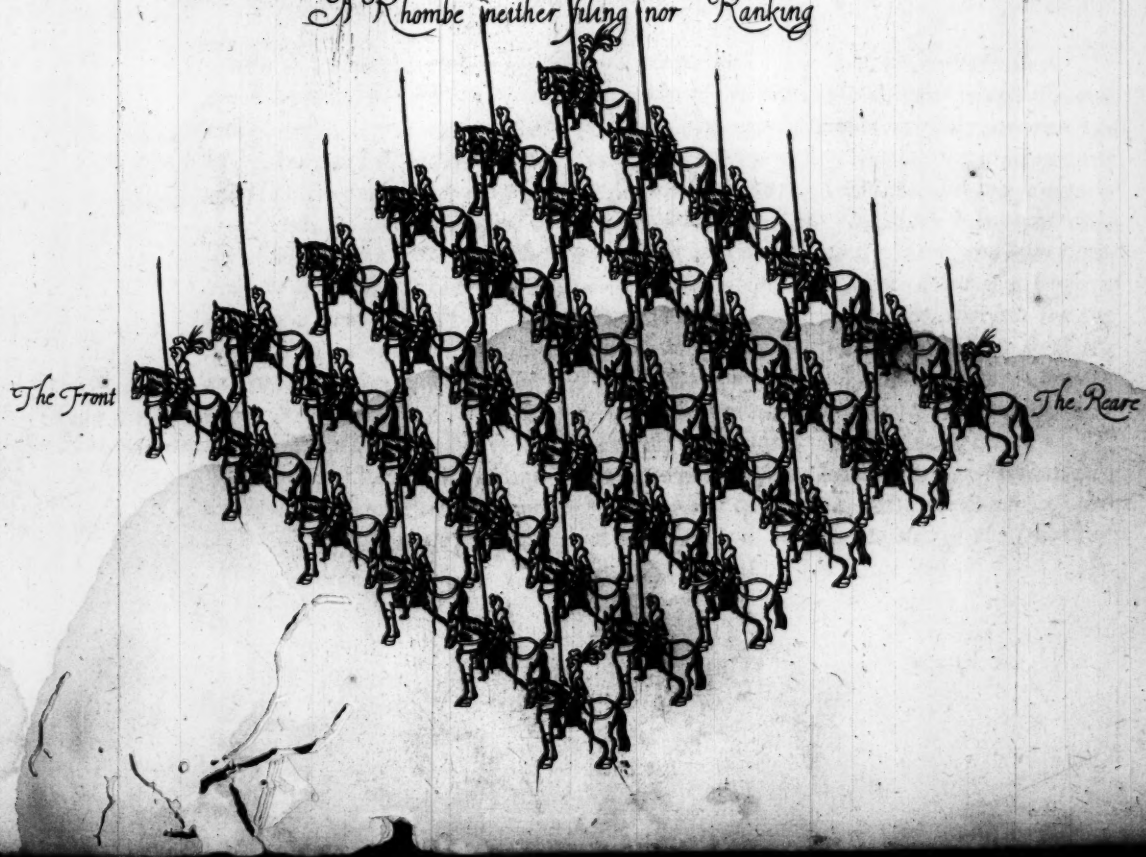
A Rhomb Ranking but not Filing



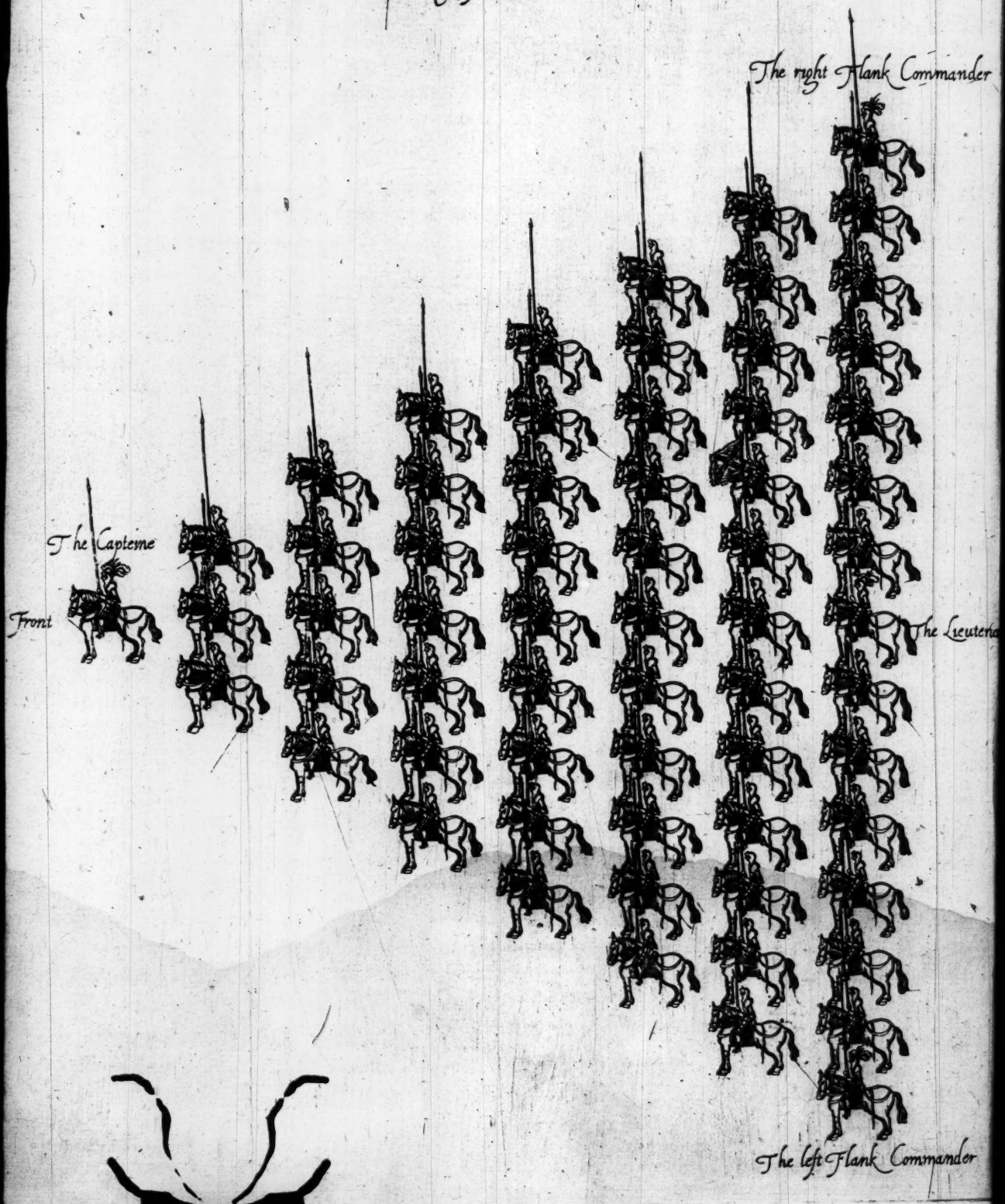
Cap. 19.

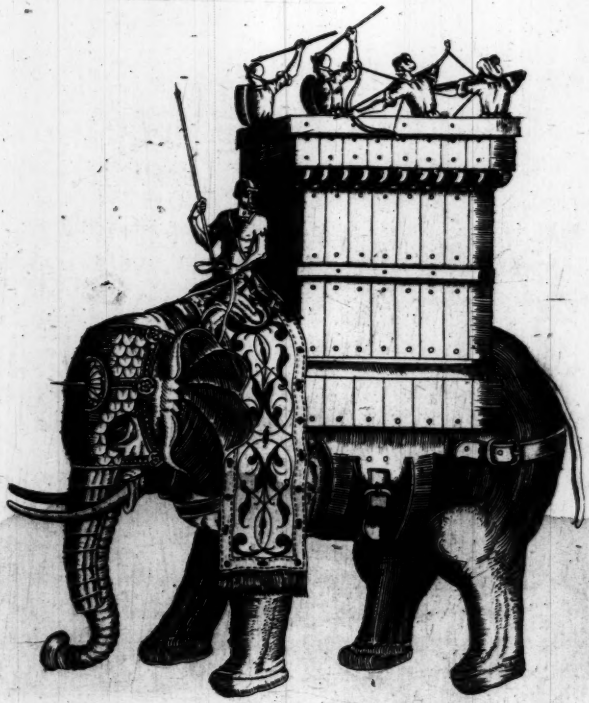
A Rhombe neither filing nor Ranking

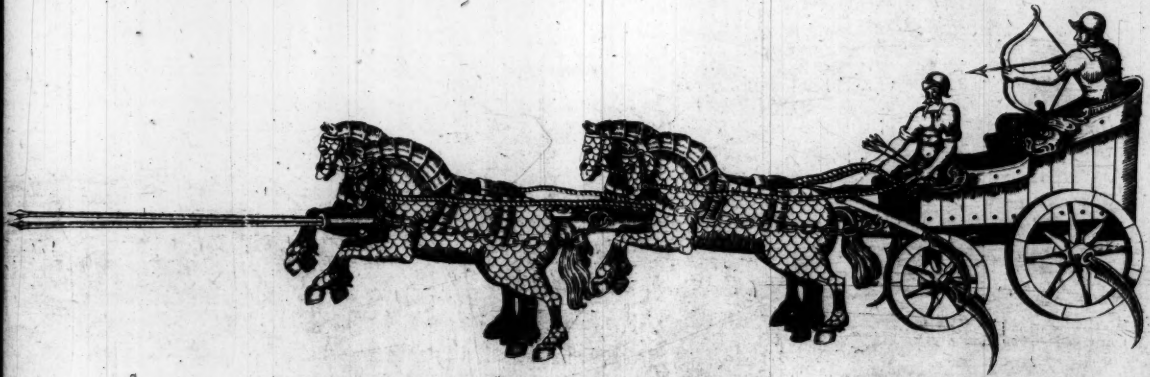


Cap 20

The ordinary horse troupe
consisting of 64



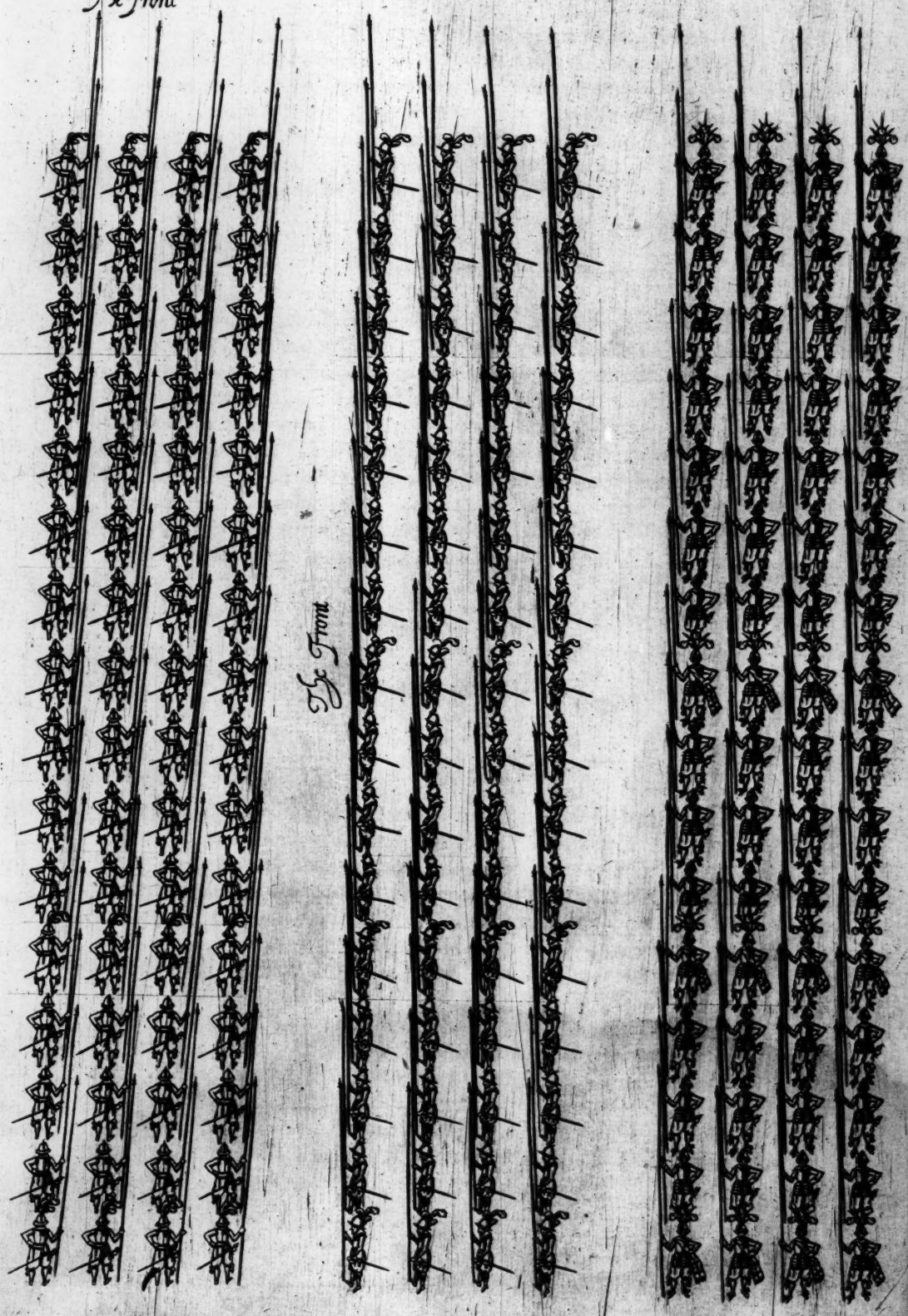




Metabole or Faces turned to the right hand

Clisis or one Turning of Faces to the right hand

The first standing



Cap. 28

The Lacedemonian Countermarche

The front after Countermarche

The ground taken beyond the reare of the Phalange

The Countermarche in action

The file-leaders aduancing in Countermarch

The firme

bringeth them

vp faces

stand turned

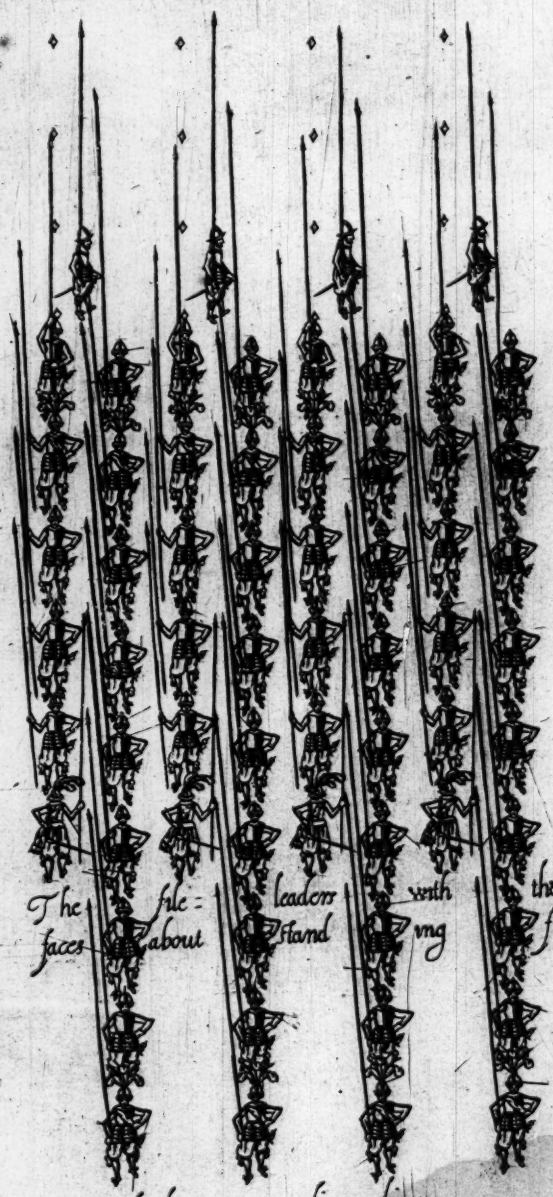
vme about

Cap 28

The Macedonian Countermache by file

The reare

The Countermarche in action



The front after Countermarche

The front of the first standing

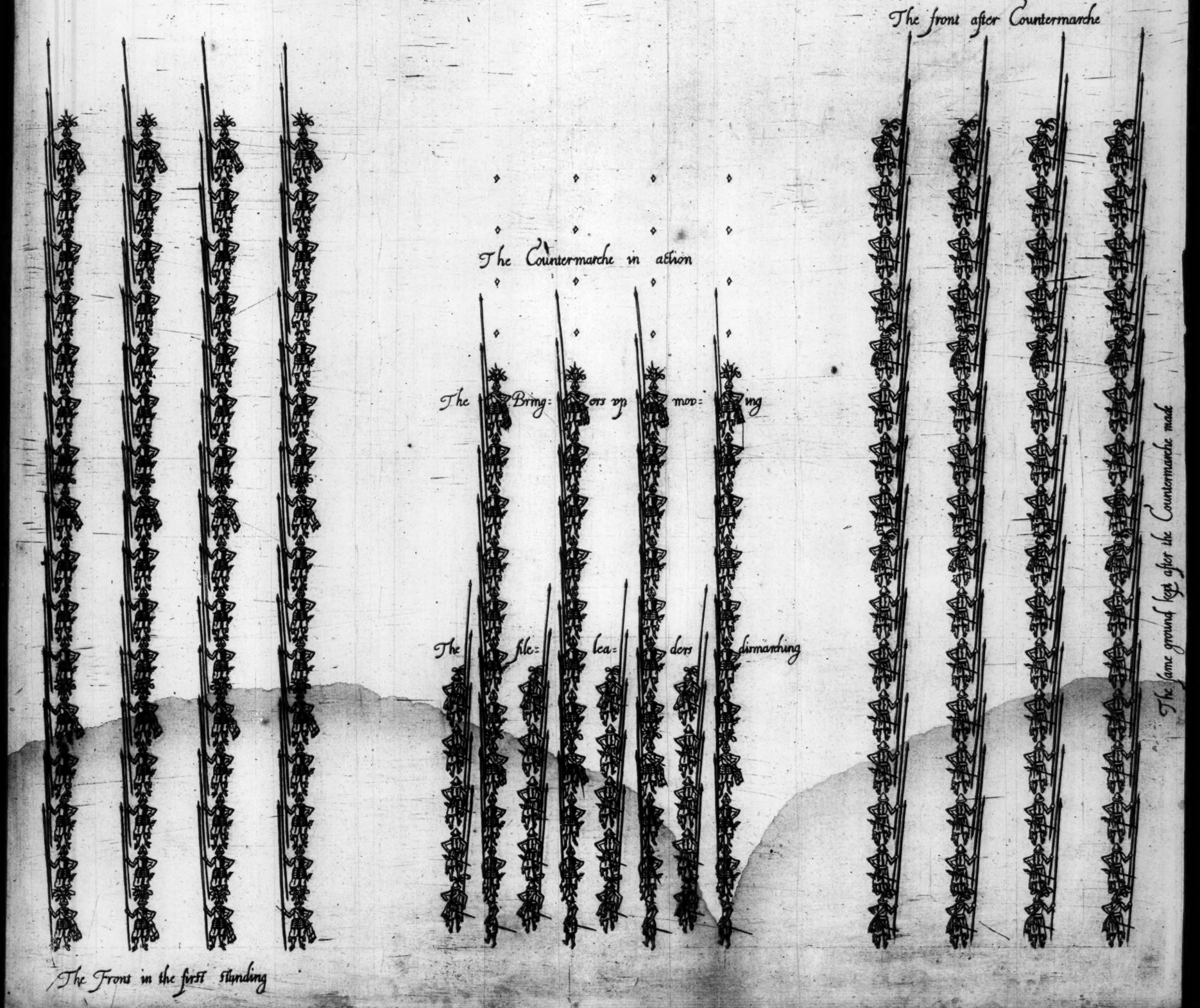
The faces | file = about | leaders stand | with ing | their frme

The bringers vp dismarching

The ground taken before ye front of the Phalange

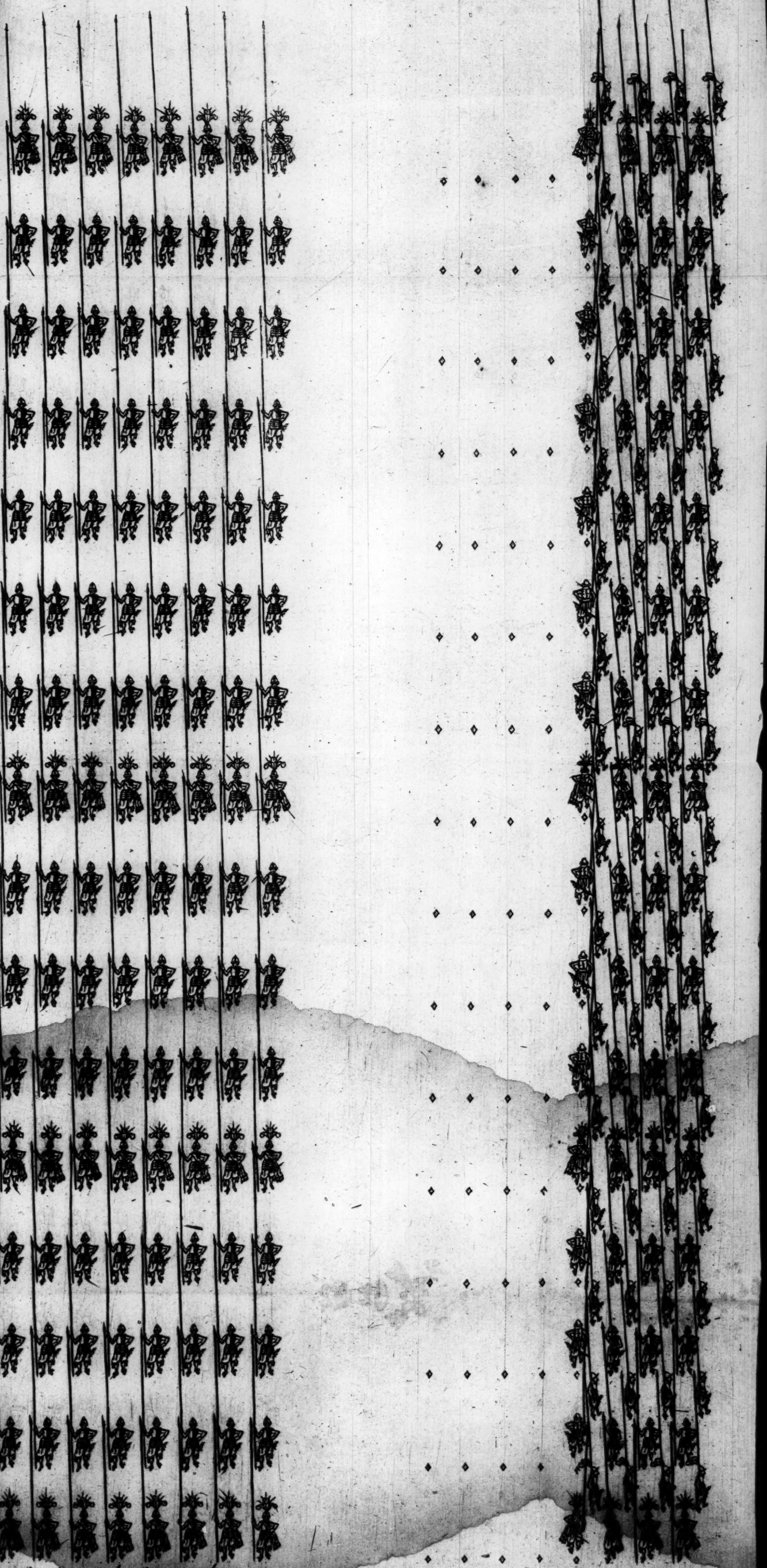
Cap. 20

The Corean Countermarche



Cap. 20.

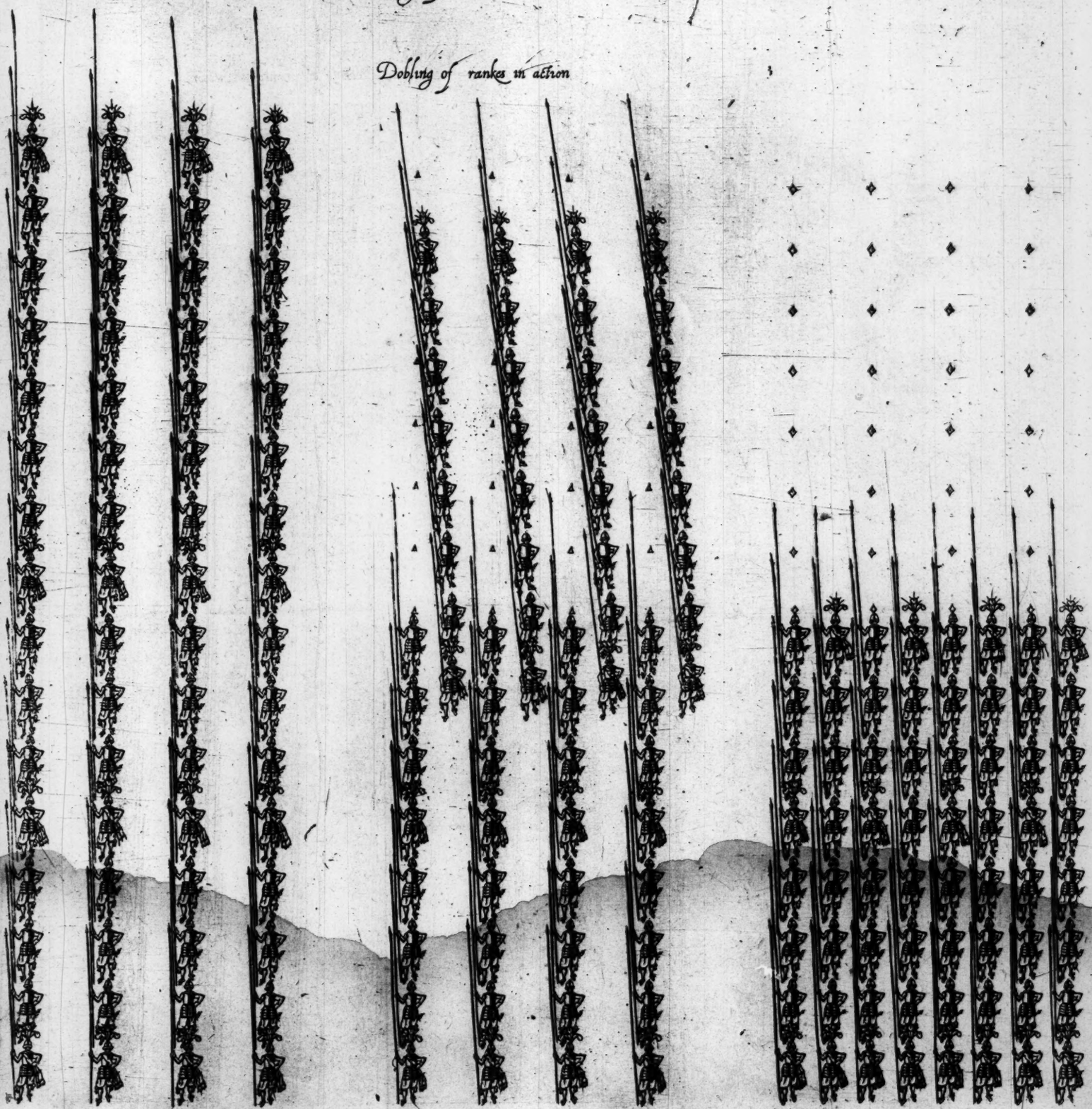
Countermarche by Ranke



Cap. 29

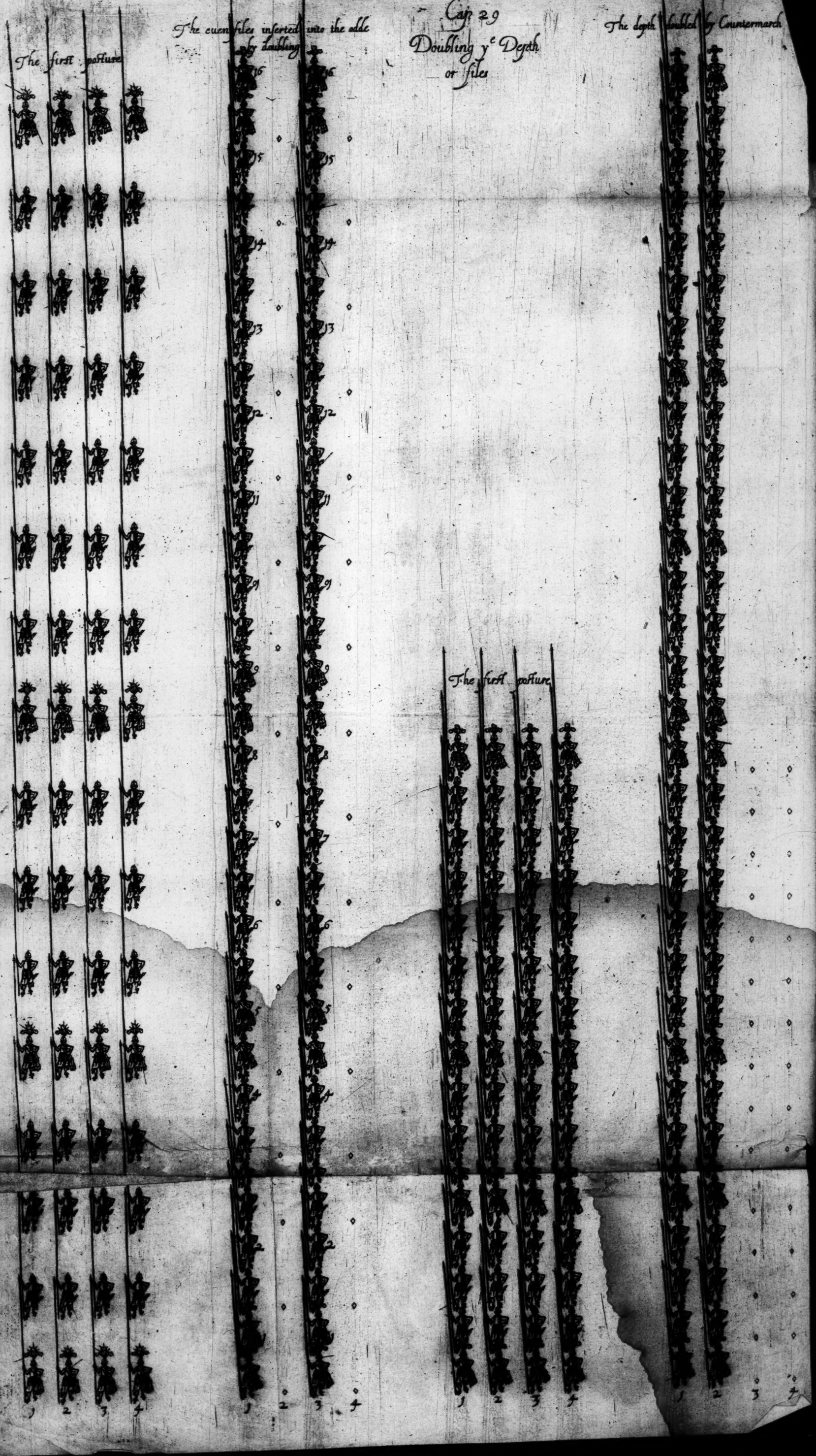
Dobling of Rankes

Dobling of rankes in action

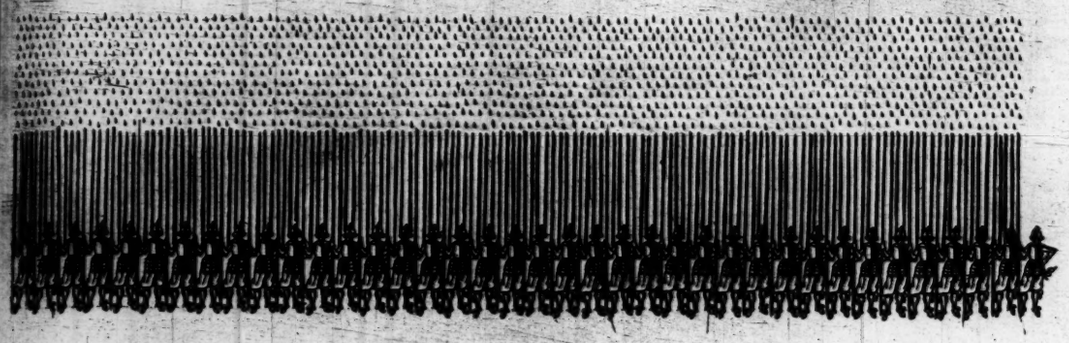


The front before Dobling of rankes

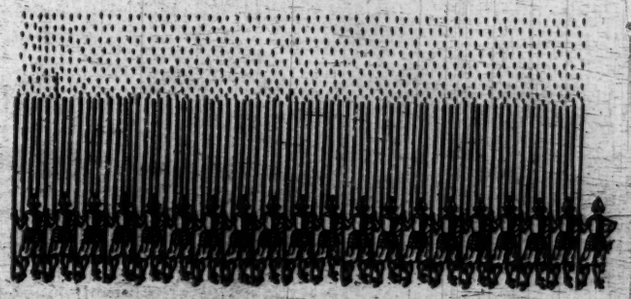
The front after Dobling of Rankes


Cap 29
Doubling ye Depth or files
The first posture
The euen files inserted into the odde by doubling
The depth doubled by Countermarch
The first posture
1 2 3 4
1 2 3 4
1 2 3 4
1 2 3 4

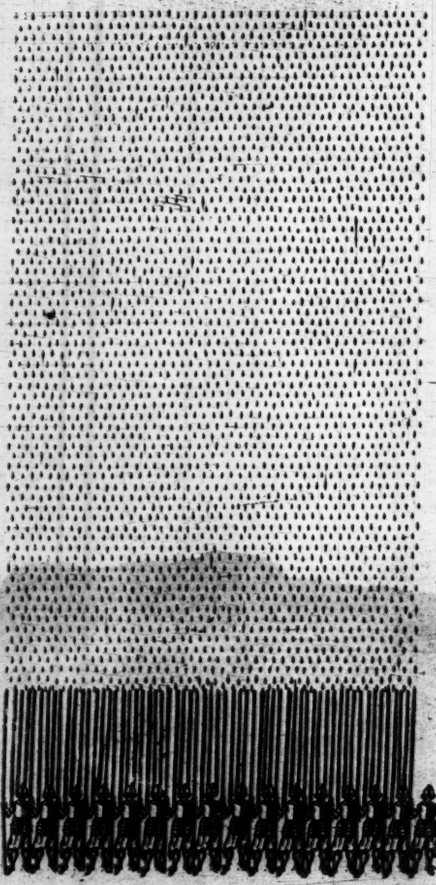
Plagiophalanx or the Brode-Fronted Phalange

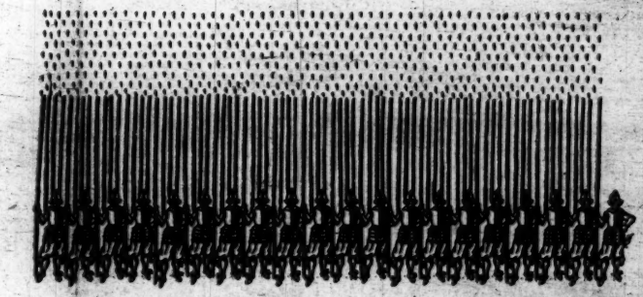


Loxe-Phalanx or the oneven fronted Phalange

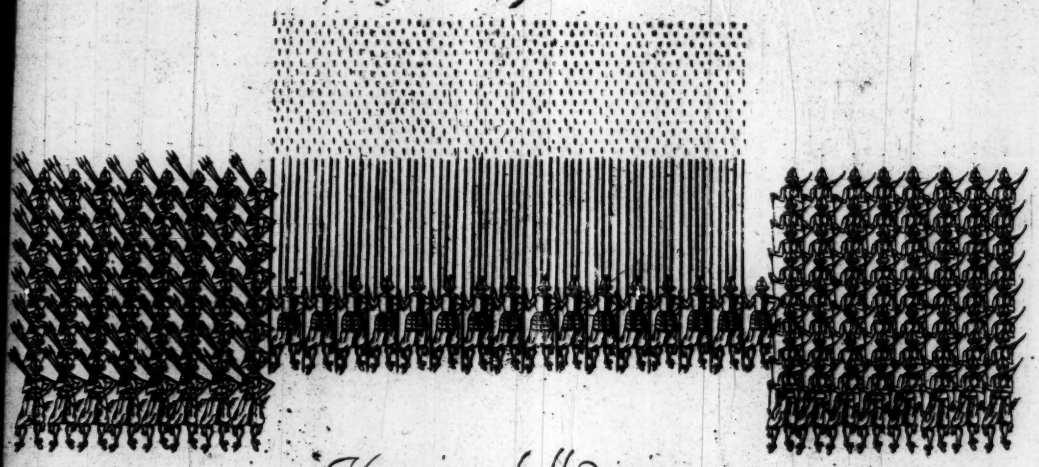


Orthiophalanx or the Herse

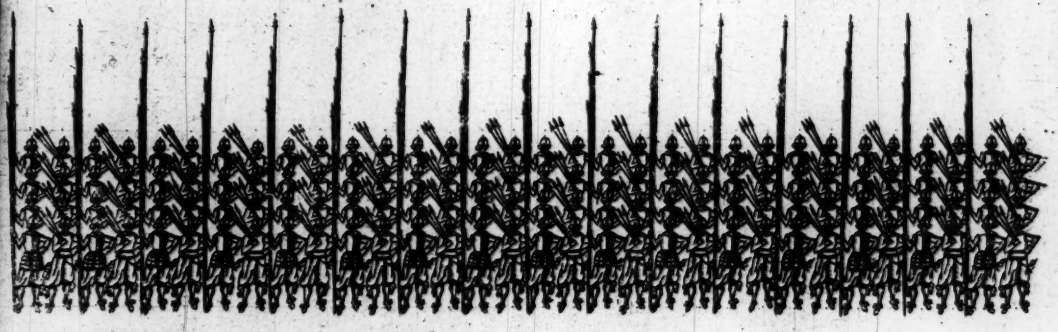




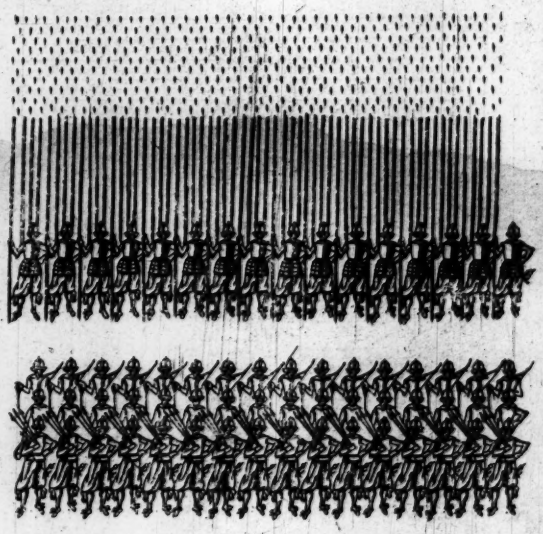
Cap. 31.



Hypotaxis, or double-winging



Entaxis, or insertion



Protaxis, or forefronting.

Cap. 32.

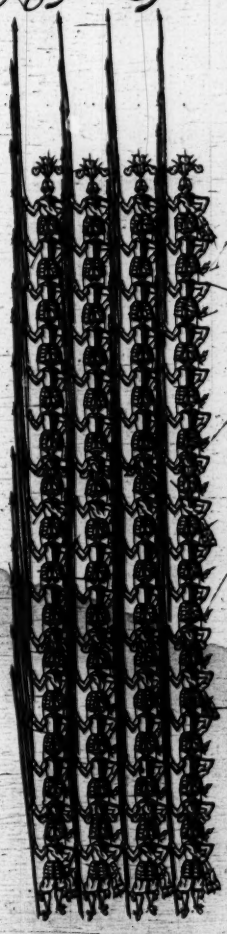
The manner of wheeling

The first posture

Closing of files

The Front

Closing of rankes forward

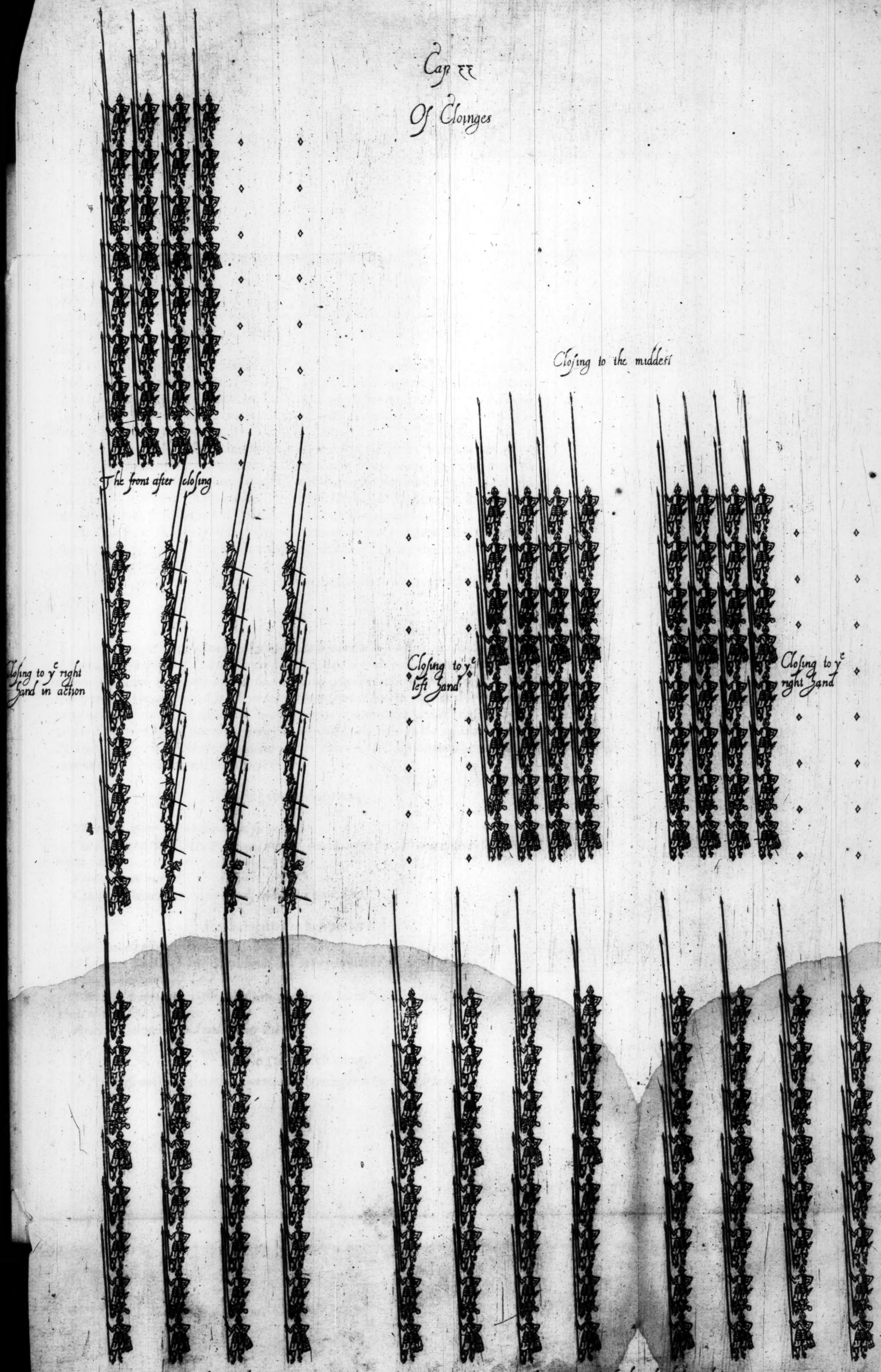


Cap. 32.

The action of wheeling

Cap ꝛꝛ

Of Cloinges



The File-leaders

A Deduction to the left hand

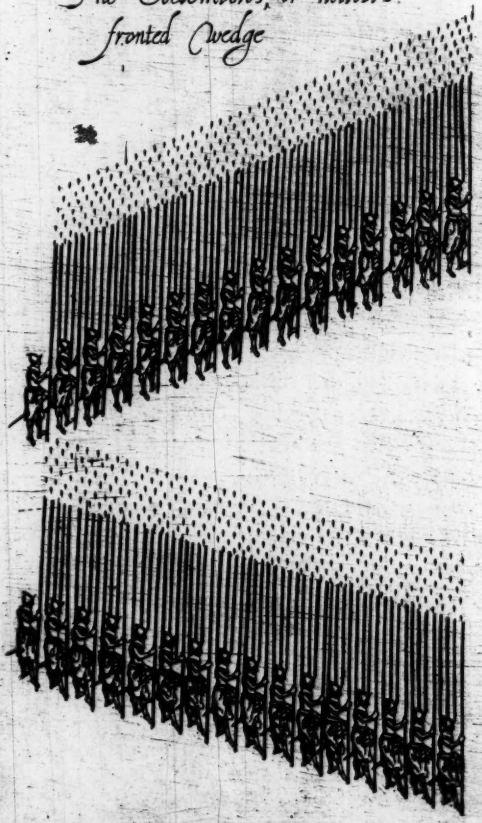
A right induction
The Front

A Deduction to the right hand

The File leaders

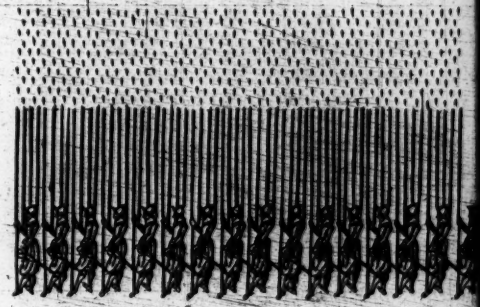
Cap. 36.

The Coelembolos, or hollow-fronted Wedge



The front

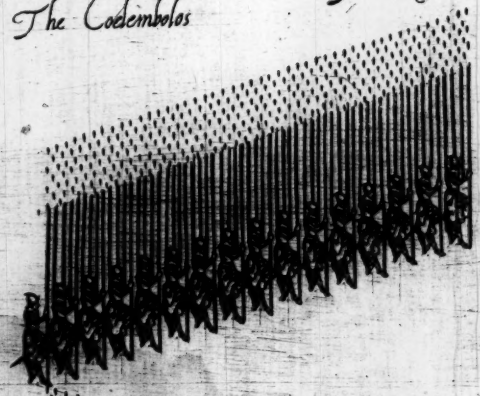
The right Induction

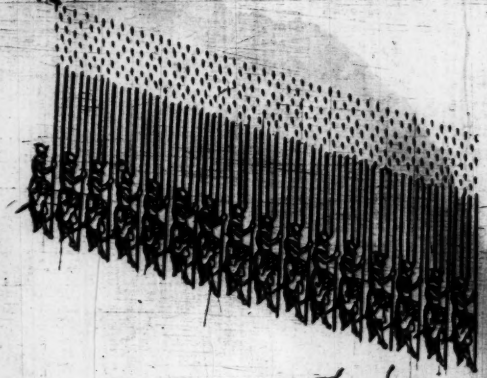


Cap. 36.

The left wing

The Coelembolos

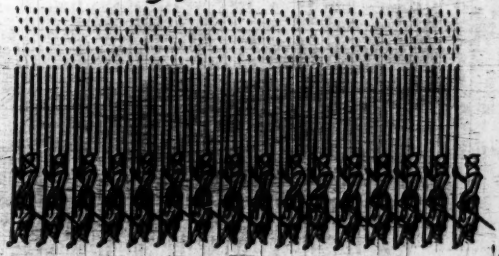




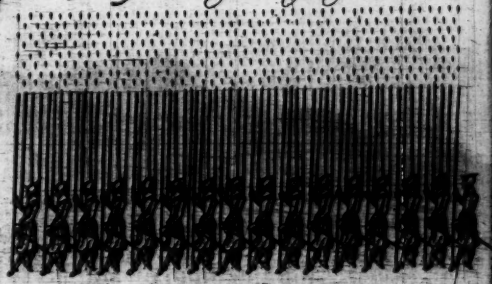
The right wing

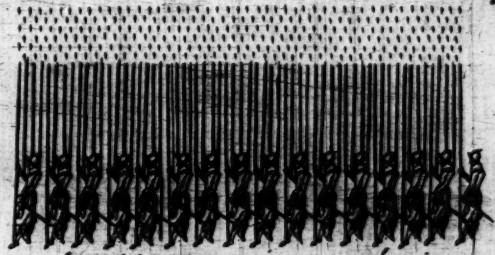
The front

The Phalange set against ye left wing of ye Coelembolos



The forbearing Phglange



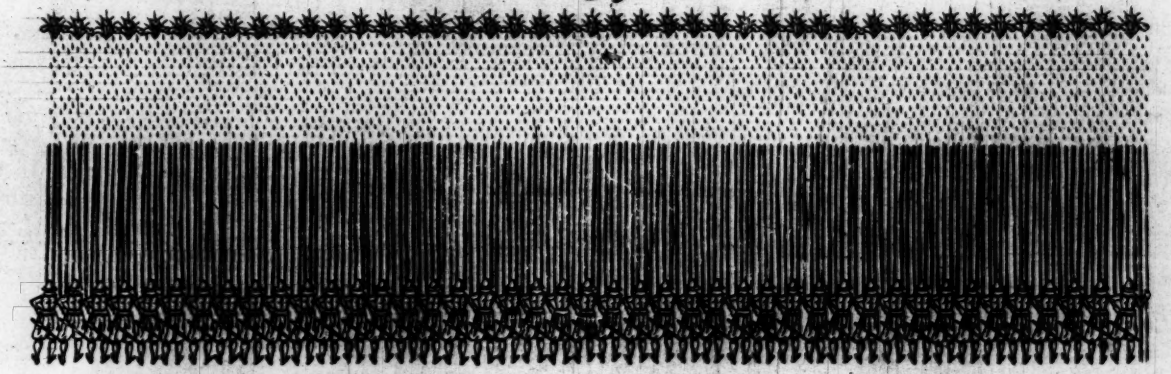


The Phalange set against ye right wing of ye Coelembolos

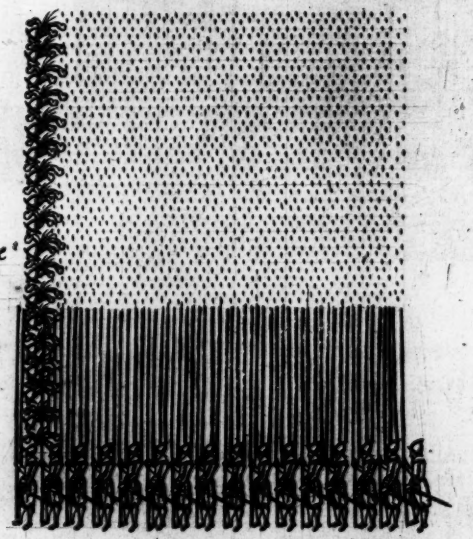
Cap. 37.

A foure fronted Phalange against all attemptes of the Enemy

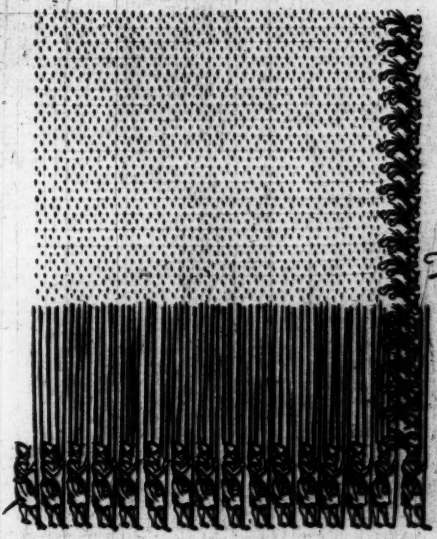
The Front of y^e reare

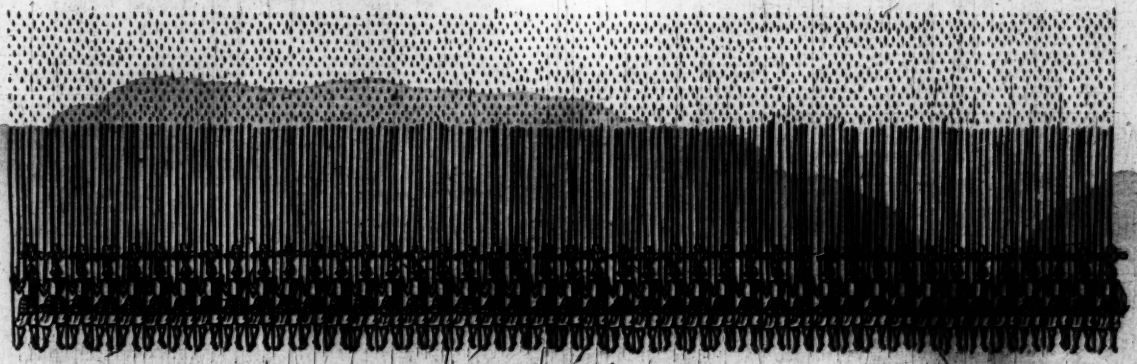


The Front of y^e right flank



The Front of y^e left flank

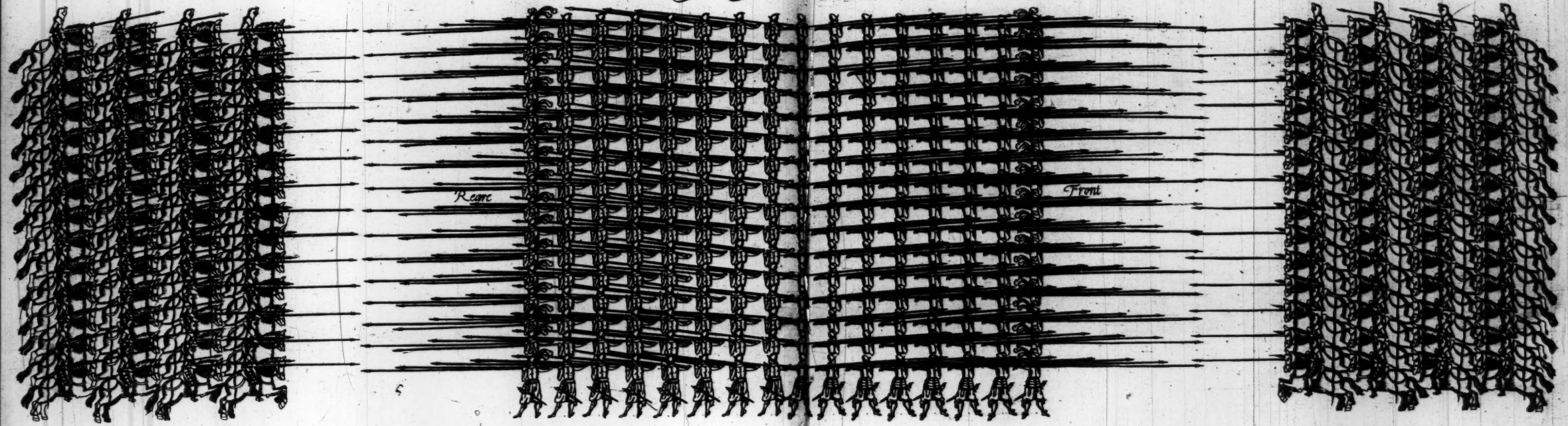




The Front of the March

Cap. 38.

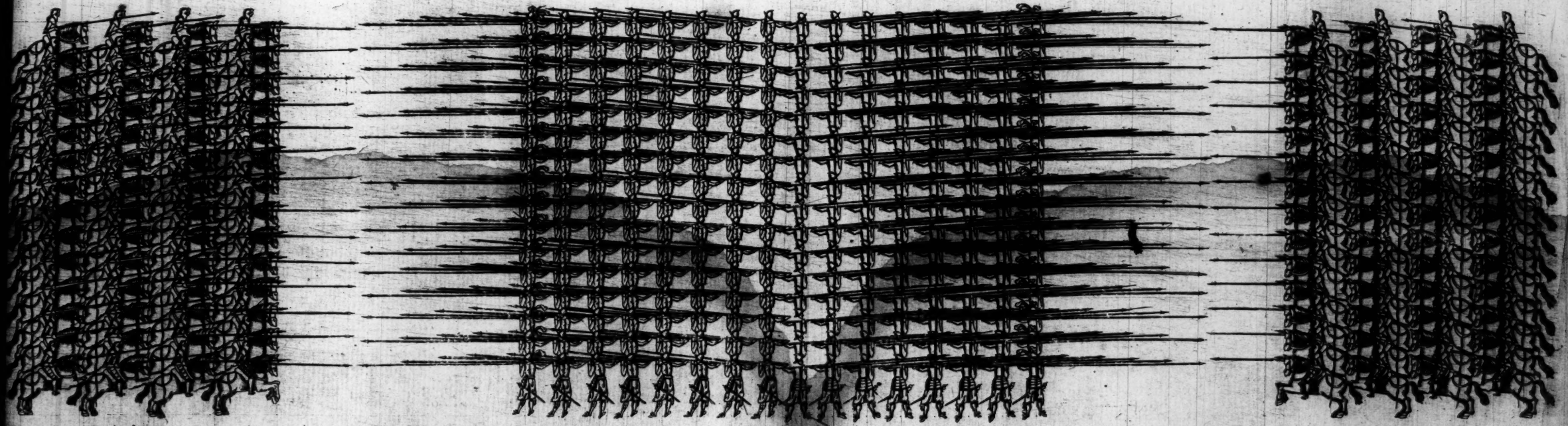
The Psalange Amphistomus



Cap. 39.

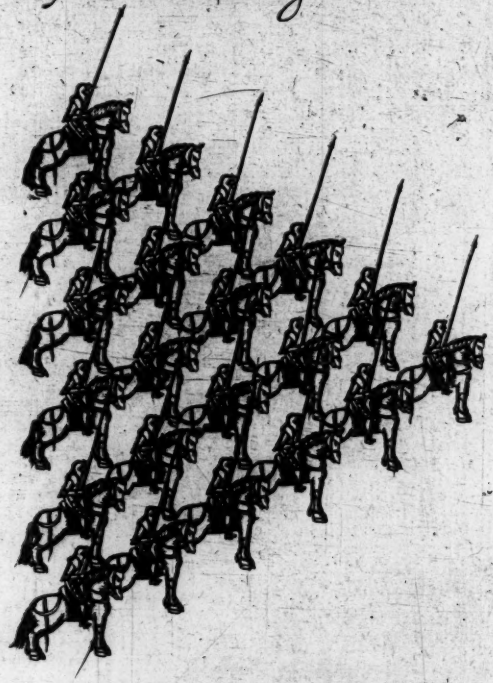
The Phalange Antistomus

Front



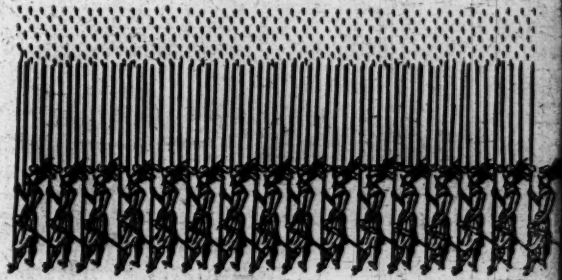
Cap. 40.

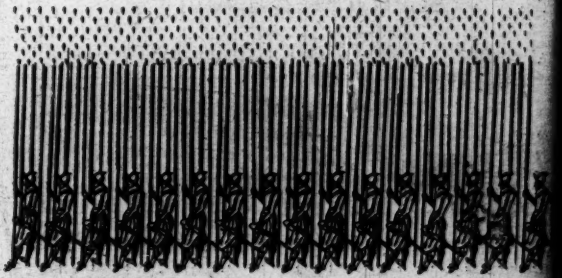
The Horsmans Wedge



Front

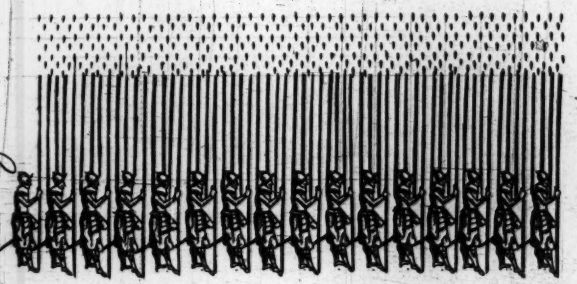
A Dyphalange Antistomus



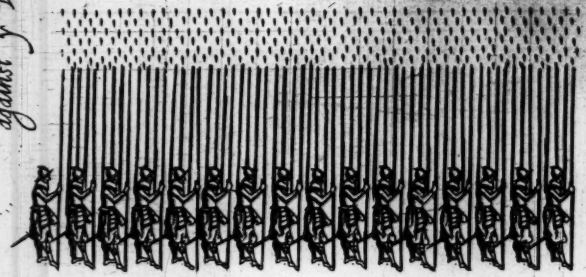


Cap. 43.

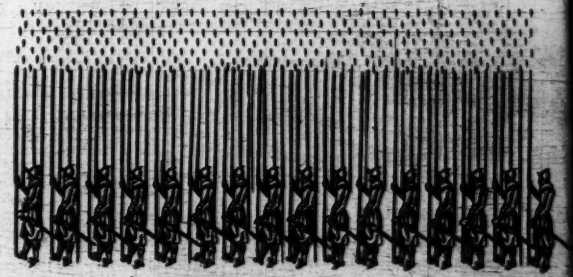
The Diphalange Peristomus



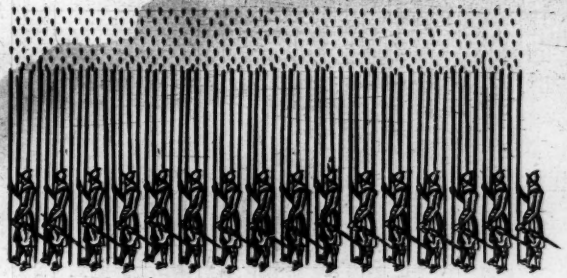
The square devised in two and left against ye Peristomus two wings



The mean front of ye Peristomus



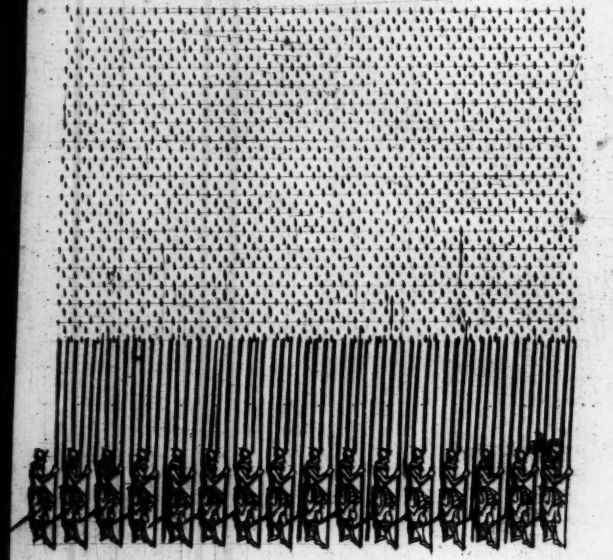
The right wing of ye Peristomus



The left wing of ye Peristomus

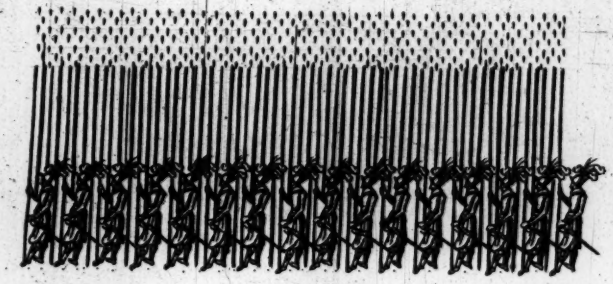
Cap. 42.

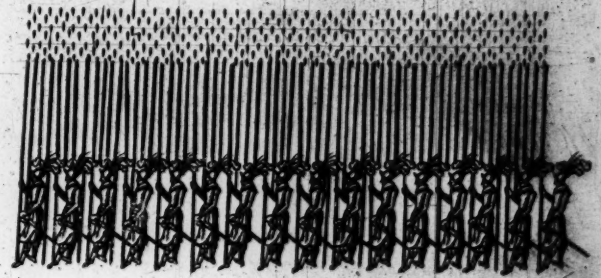
The Battaile called Phrithium



The front

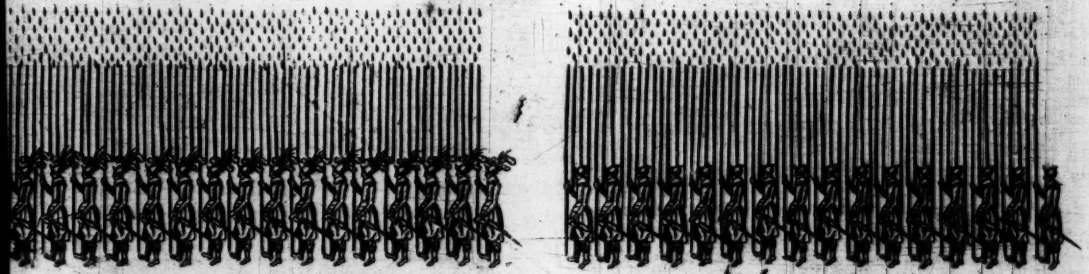
The Diphalange Homoiostomus





Cap. 43.

The Diphalange Heterostomus

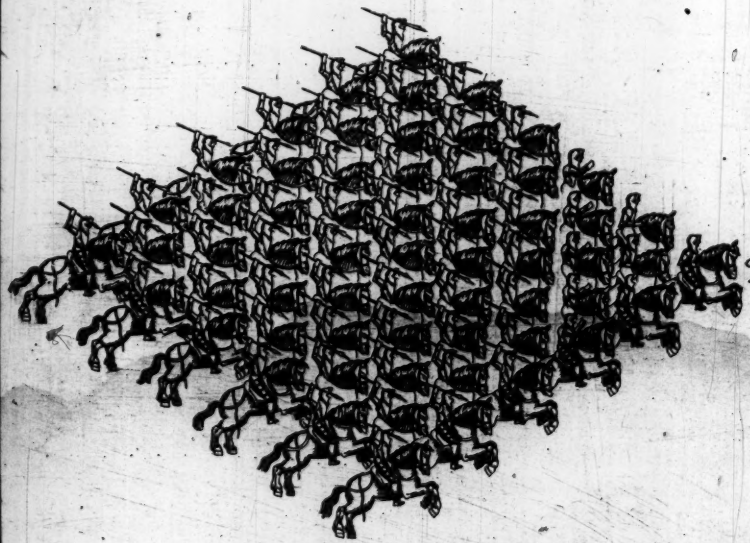


The File-leaders

The bringers-up

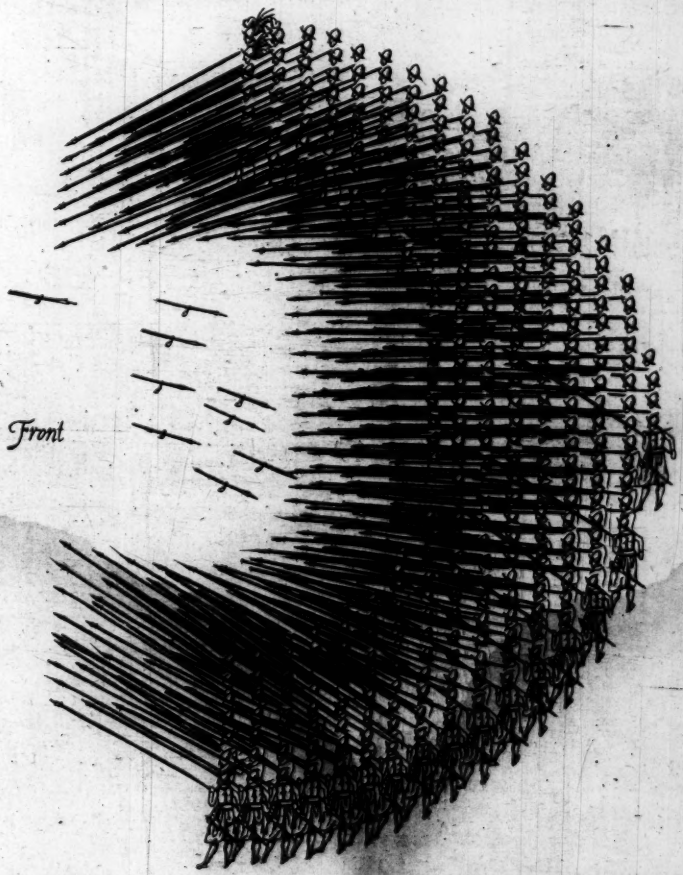
Cap. 44

The Rhombe of Horse



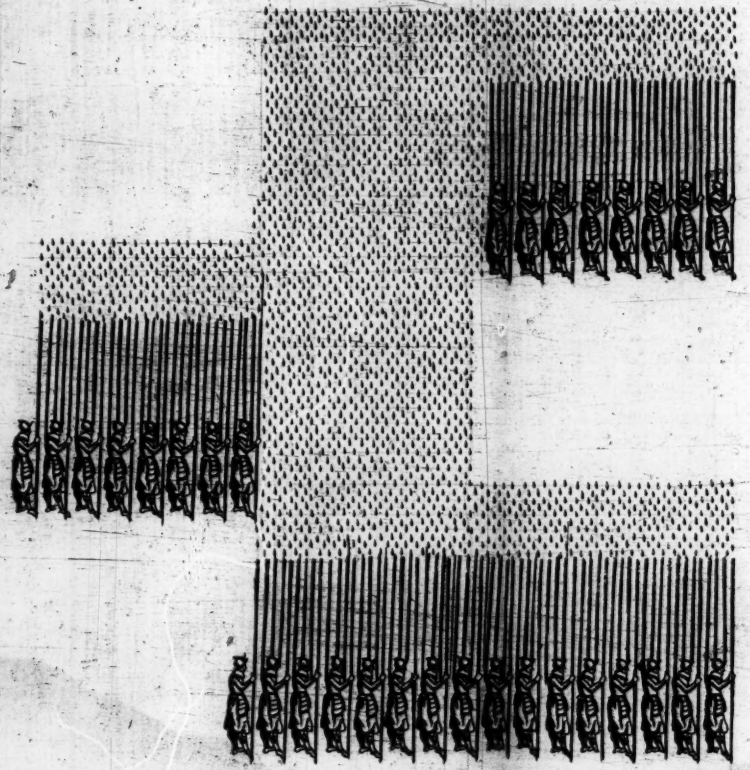
The Front

The half Moone or Menoides of foote



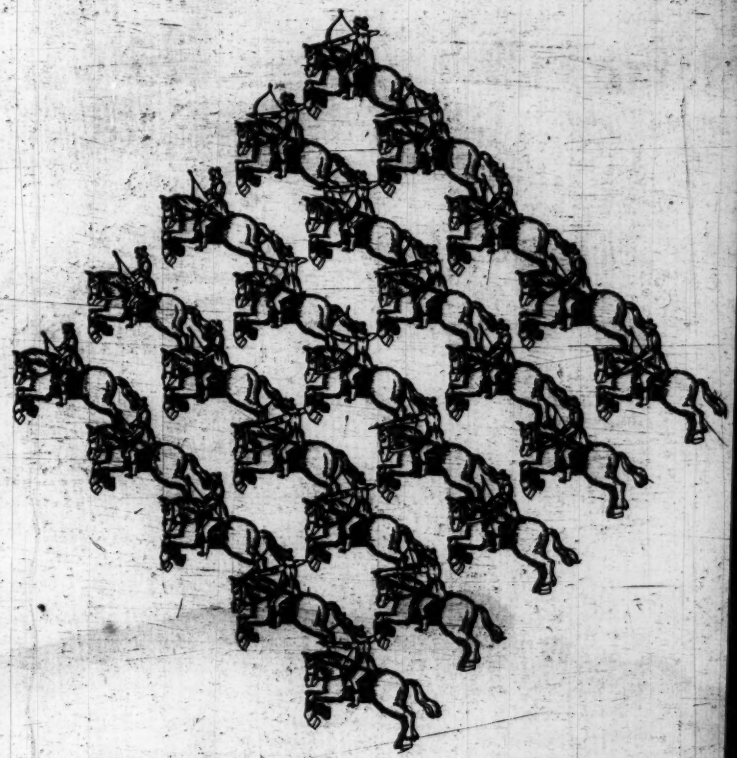
Epcampios Emprosthia

Cap. 46.



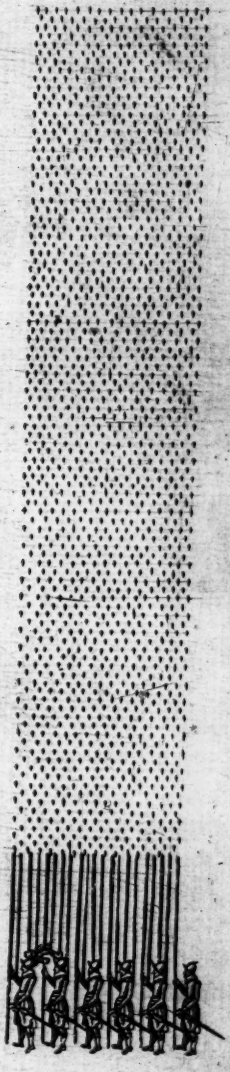
The front

The Rhombe

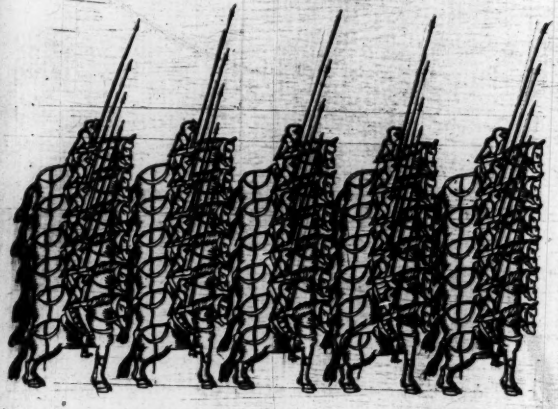


Cap: 45.

Plagiophalanx, or ye broad fronted battaile of foote



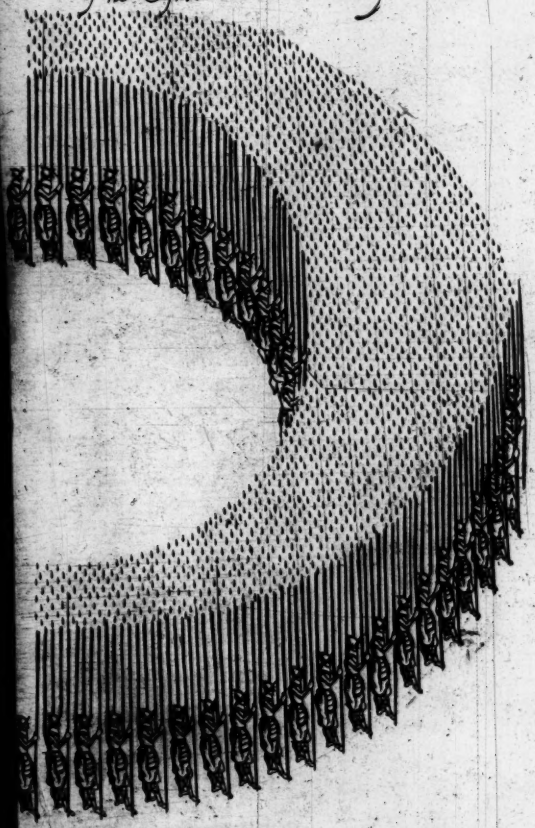
Heteromekes or ye Herse of Horse



The front

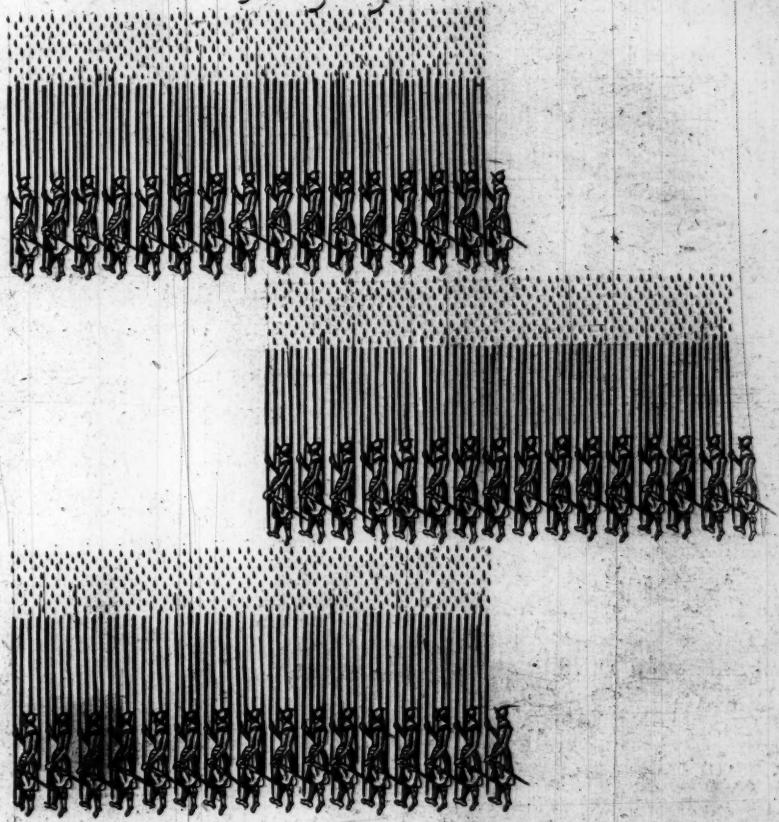
The Cyrte or conuex hallf Mone

Cap. 47.



The front

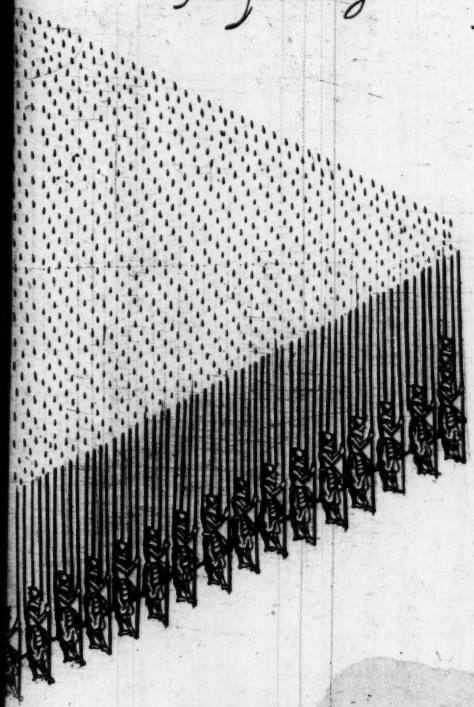
The Epicampros



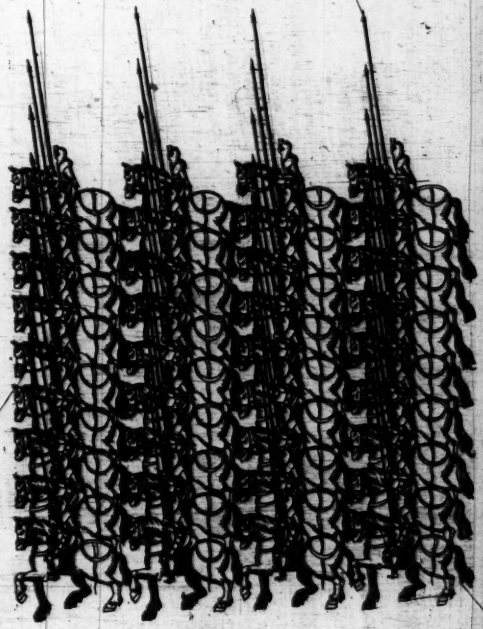
Cap. 48.

The Horsbattaile square in figure, not in horre

The forte Wedge



The front

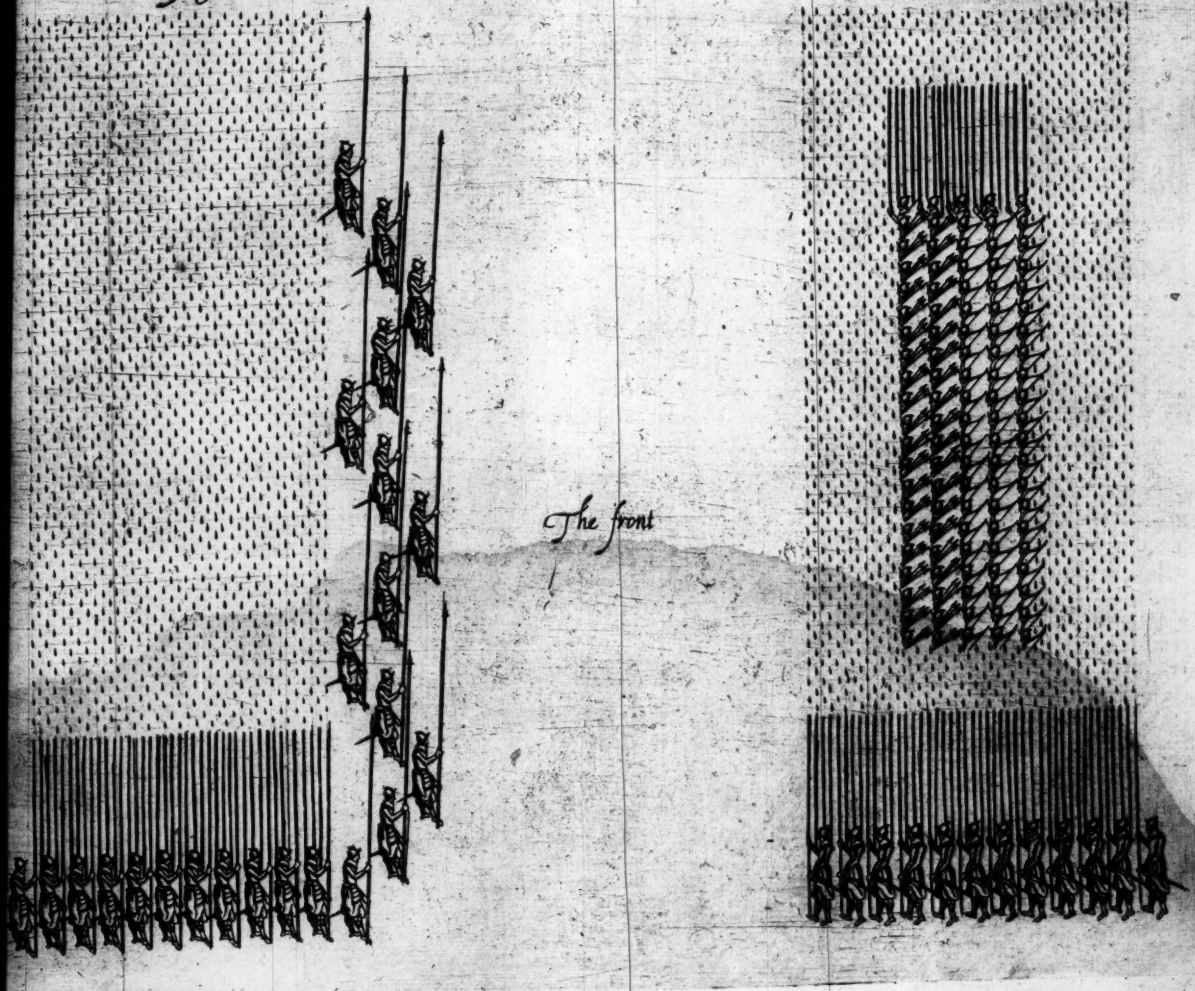


Cap. 49.

The Peplegmene

The Plesium

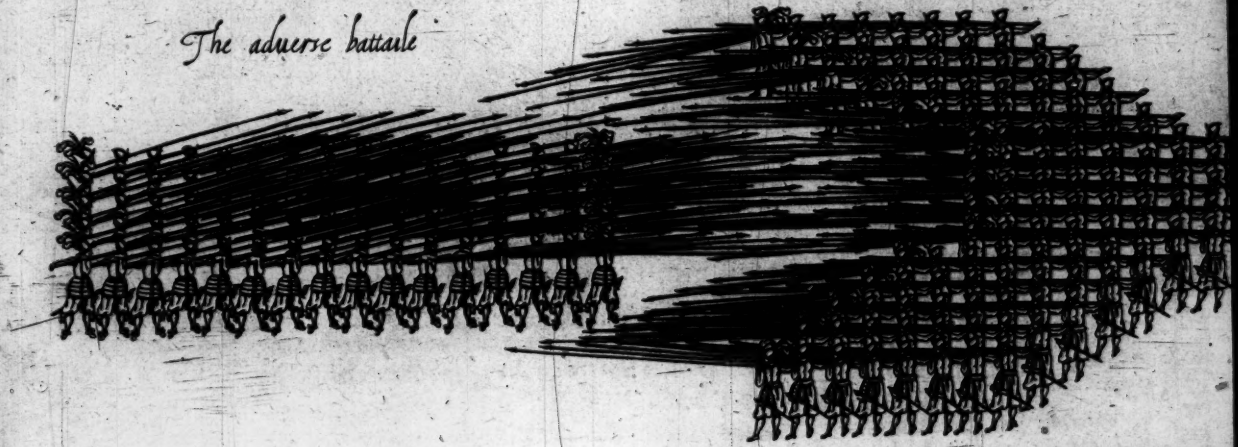
The front



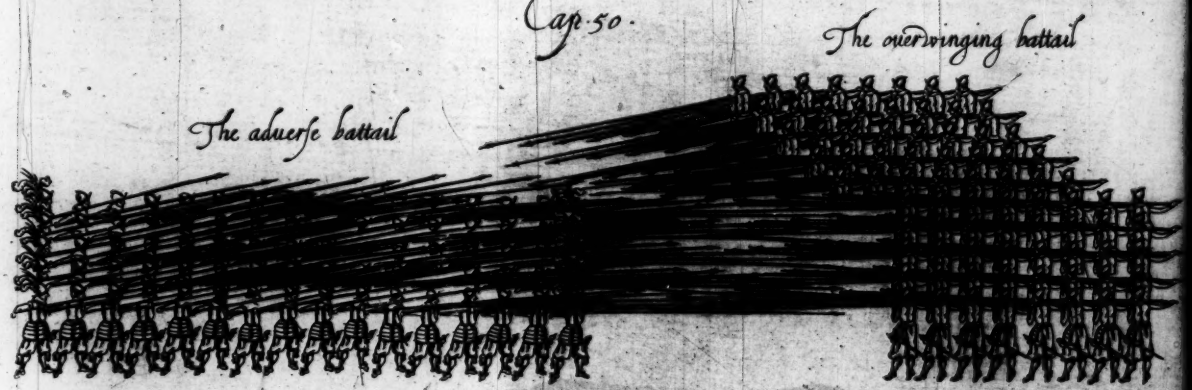
Cap. 50.

The ouerfronting battaule

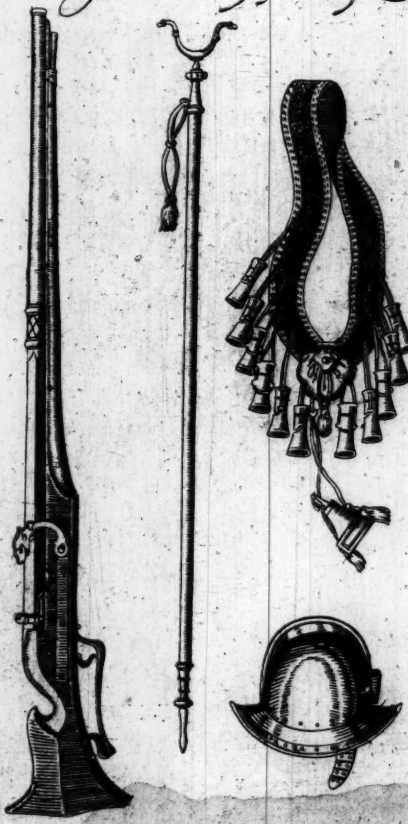
The aduerse battaule

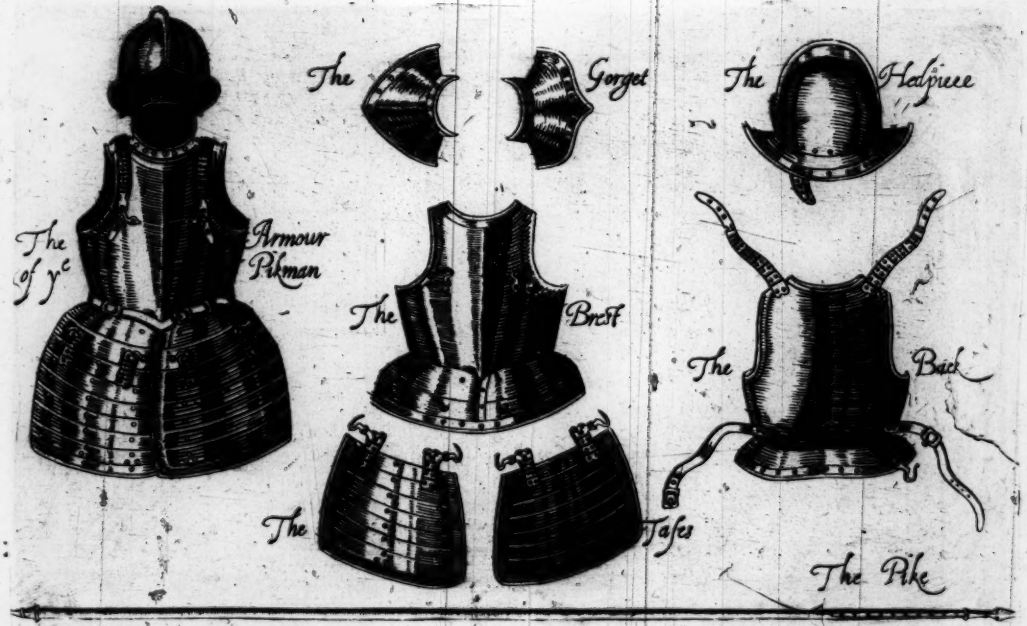


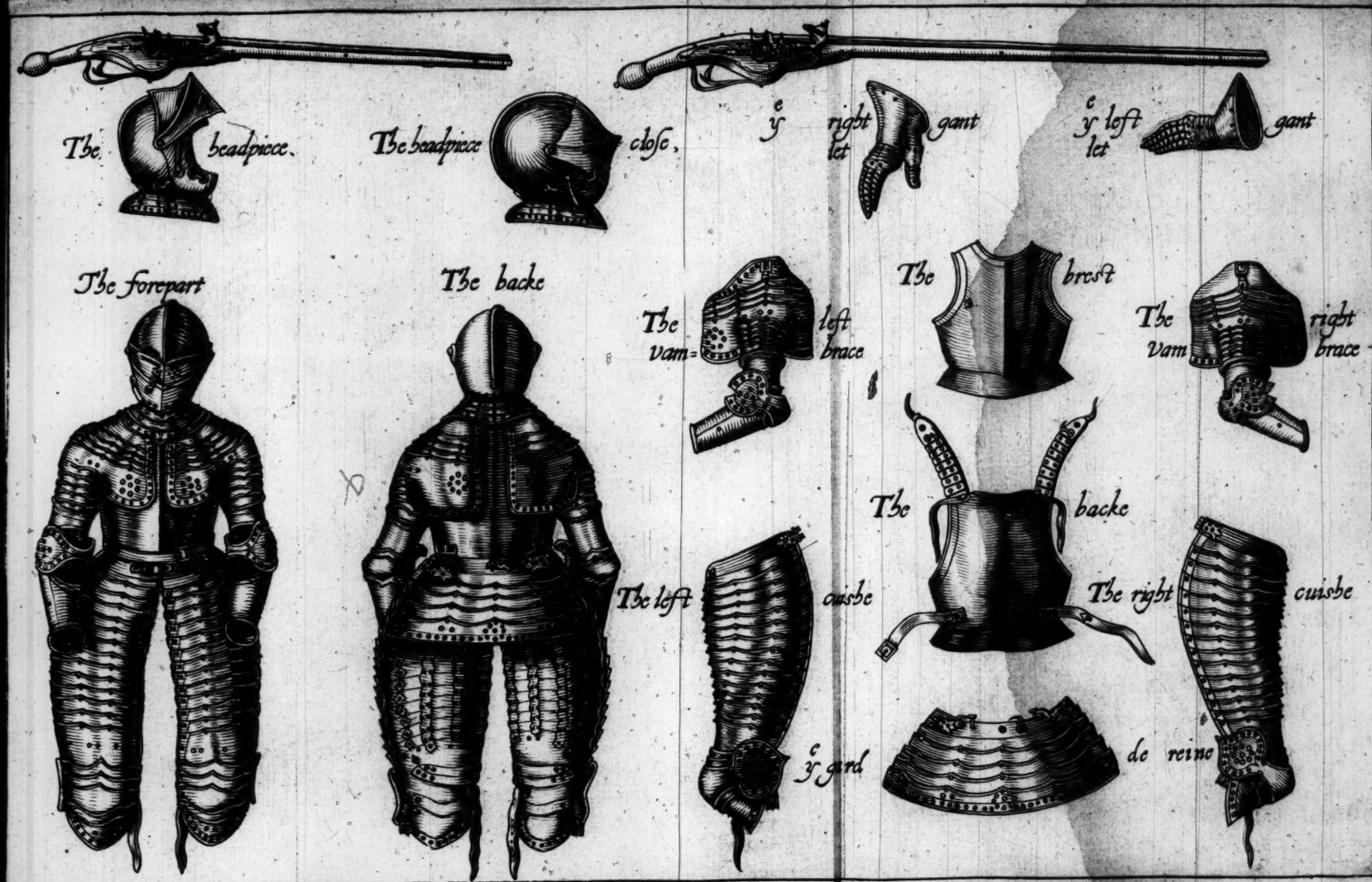
Cap. 50.



The armes of y^e Musketier




The
Gorget
The
Headpeece
The
of yᵉ
Armour
Pikman
The
Brest
The
Back
The
Tases
The Pike


The headpiece.
The headpiece close,
ye right let gant
ye left let gant
The forepart
The backe
The left vam= brace
The brest
The right vam brace
The backe
The left cuishe
The right cuishe
ye gard de reine